

# Bibliography of *Astyanax* Cavefishes

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804 references listed by authors, 11/22/2017

- Aguayo-Camargo, J.E. 1998. The middle Cretaceous El Abra Limestone at its type locality (facies, diagenesis and oil emplacement), east-central Mexico. *Revista Mexicana de Ciencias Geológicas* 1998, 15:1–8.
- Albert, Richard O. 2006. The Great Sierra de El Abra Expedition. *AMCS Activities Newsletter*, 29:132-143.
- Albert, Richard O. 2016. The Search for Sótano del Grunge: Exploration of Sótano del Malpaís. *AMCS Activities Newsletter*, 40:96-101.
- Albert, Richard O. 2018. The Second Great Sierra de El Abra Expedition. Unpublished manuscript. AMCS., in press. 100 p.
- Alexander, Ed. 1965. Trip report. *AMCS Newsletter*, 1:116.
- Alexander, Ed. 1965. Trip report. *AMCS Newsletter*, 1:52-54.
- Alunni A., Menuet A., Candal E., Pénigault JB., Jeffery W.R., Rétaux S. 2007. Developmental mechanisms for retinal degeneration in the blind cavefish *Astyanax mexicanus*. *Journal of Comparative Neurology*. 2007 Nov 10; 505(2):221-33.
- Alvarado, Carlos Garita, 2017. Parallel evolution of body shape in *Astyanax* (Characidae) morphotype. AIM 2017 posters:47.
- Álvarez, José 1959. Nota preliminar sobre la ictiofauna del estado de San Luis Potosí. *Act. Cientif. Potosina*,3(1):71-88.
- Álvarez, José. 1946. Revision del genero *Anoptichthys* con descripción de una especie nueva (Pisces, Characidae). *Annales de la Escuela Nacional de Ciencias Biológicas de Mexico*, 4:263-282.
- Álvarez, José. 1947. Descripción de *Anoptichthys hubbsi* caracínido ciego de la cueva de los Sabinos, S.L.P. *Revista de la Sociedad Mexicana de Historia Natural*, 8(1-4):215-219.
- Álvarez, José. 1950. Claves para la determinación de especies en los peces de las aguas continentales mexicanas. México. Secretaría de Marina, Dirección General de Pesca e Industrias Conexas. 143 pp.
- Álvarez, José. 1970. Peces mexicanos (claves). *Inst. Nac. Investigaciones Biol. Pesqueras, Ser. Investigación Pesquera, Estudio*, 1. 166 pp.
- Anonymous. 1940. Expedición para recoger peces ciegos en México. *Ciencia*, 1:221.
- Anonymous. 1945. Notes on the blind cave tetra. *Aquarium, Philadelphia*, 14(4):70.
- Anonymous. 1965. Caves of the Sierra de El Abra. Part 1. Tamaulipas. *AMCS Newsletter*, 1(2):14-19.
- Armstrong-Altrin J., Madhavaraju J., Sial A., Kasper-Zubillaga J., Nagarajan R., Flores-Castro K., Rodríguez J. 2011. Petrography and stable isotope geochemistry of the Cretaceous El Abra Limestones (Actopan), Mexico: Implication on diagenesis. *J Geol Soc India* 2011, 77:349–359.
- Aspiras AC., Rohner N., Martineau B., Borowsky RL., and Tabin CJ. 2015. Melanocortin 4 receptor mutations contribute to the adaptation of cavefish to nutrient-poor conditions. AIM 2015 abstracts:23.
- Aspiras AC, Rohner N, Martineau B, Borowsky RL, Tabin CJ. 2015. Melanocortin 4 receptor mutations contribute to the adaptation of cavefish to nutrient-poor conditions. *Proc Natl Acad Sci U S A*. 2015 Aug 4;112(31):9668-73. doi: 10.1073/pnas.1510802112. Epub 2015 Jul 13.
- Association for Mexican Cave Studies (AMCS). 1966. Cueva Grande map. <http://www.mexicancaves.org>
- Atkinson, Gerald. 2004. Preface. Pp. 9-11 in Fish, Johnnie E. 2004. Karst hydrology of the Sierra de El Abra, Mexico. *AMCS Bulletin* 14:186.
- Atukorala AD., Hammer C., Dufton M., Franz-Odenaal TA. 2013. Adaptive evolution of the lower jaw dentition in Mexican tetra (*Astyanax mexicanus*). *EvoDevo*. 2013 Oct 7;4(1):28. doi: 10.1186/2041-9139-4-28.
- Atukorala, A.D.S., and Franz-Odenaal, T. A. 2014. Spatial and temporal events in tooth development of *Astyanax mexicanus*. *Mechanisms of Development*, 134:42-54.
- Atukorala, A.D.S., and Franz-Odenaal, T. A. 2014. *Astyanax mexicanus*-A novel model of tooth shape formation and regeneration *American Journal of Medical Genetics Part A*, 164:1876.
- Atukorala, A.D.S., and Tamara A. Franz-Odenaal. 2015. Evolution and development of the cavefish oral jaws: Adaptations for feeding. Chapter 11, pp. 209-225 In: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), *Biology and Evolution of the Mexican Cavefish*. Academic Press (Elsevier), Amsterdam. 404 pp.
- Atz, James W. 1950. Fishes from deserts and caves. *Animal Kingdom*, 53(3):87-90.
- Awise, John C. and Robert K. Selander. 1972. Evolutionary genetics of cave-dwelling fishes of the genus *Astyanax*

- Evolution, 26(1):1-19.
- Axelrod, H, C. Emmens, D. Sculthorpe, W. Vorderwinkler, R. Socolof, and N. Pronek. 1962. Exotic tropical fishes. Sterling Publ. Co, New York.
- Baker, CF and Montgomery, J. 1999. The sensory basis of rheotaxis in the blind Mexican cave fish, *Astyanax fasciatus*. Journal of Comparative Physiology A, 184:519-527.
- Barr, Thomas C., Jr. 1956. Note on cave blindfish. Speleo Digest, 1956(2): 12-13.
- Barr, Thomas C., Jr. 1968. Cave ecology and the evolution of troglobites. Evolutionary Biology, 2:35-102.
- Bath, H. 1962. Vergleichende biologisch-anatomische Untersuchungen Über die Leistungsfähigkeit der Sinnesorgane für den Nahrungserwerb, ihre gegenseitige Abhängigkeit und ihre Beziehungen zum Bau des Gehirns bei verschiedenen Knochenfischarten. Z. Wiss. Zool, 167(3-4): 238-290.
- Beale A., Guibal C., Tamai TK., Klotz L., Cowen S., Peyric E., Reynoso VH, Yamamoto Y., Whitmore D. 2013. Circadian rhythms in Mexican blind cavefish *Astyanax mexicanus* in the lab and in the field. Nat Commun. 2013;4:2769. doi: 10.1038/ncomms3769.
- Beale, A.D., and D. Whitmore. 2015. Daily rhythms in a timeless environment: Circadian clocks in *Astyanax mexicanus*. Chapter 16, pp. 209-333 IN: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), Biology and Evolution of the Mexican Cavefish. Academic Press (Elsevier), Amsterdam. 404 pp.
- Behrens M., Langecker TG., Wilkens H, Schmale H. 1997. Comparative analysis of Pax-6 sequence and expression in the eye development of the blind cave fish *Astyanax fasciatus* and its epigeal conspecific. Mol Biol Evol. 1997 Mar;14(3):299-308.
- Behrens M., Wilkens H, Schmale H. 1998. Cloning of the alphaA-crystallin genes of a blind cave form and the epigeal form of *Astyanax fasciatus*: a comparative analysis of structure, expression and evolutionary conservation. Gene. 1998 Aug 31;216(2):319-26.
- Benn, James H. 1945. Composite observations on cave life (with special reference to blind fishes). National Speleological Society Bulletin, 7:9-13.
- Bensouilah M., Denizot JP. 1991. Taste Buds and neuromasts of *Astyanax jordani*: Distribution and immunohistochemical demonstration of co-localized Substance P and enkephalins. Eur J Neurosci. 1991;3(5):407- 414.
- Bermingham, E. and A.P. Martin. 1998. Comparative mtDNA phylogeography of neotropical freshwater fishes: Testing shared history to infer the evolutionary landscape of lower Central America. Mol Ecol 1998, 7:499–517.
- Bermúdez-González, Ma. P., A. Bautista, and C.P. Ornelas García. 2013. Characterization of two trophic ecotypes of Lake Catemaco through diet analysis of stable isotopes. AIM 2013 abstracts:23.
- Bermúdez-González, Maria Pamela, Carlos Pedraza-Lara , Joshua B. Gross y Claudia Patricia Ornelas-García. 2015. Morphological and ecological variation in contrasting environments in the Mexican sardine (*Astyanax mexicanus* De Filippi 1853). AIM 2015 posters:27.
- Berra, Tim. 1965. A study of *Anoptichthys jordani*. Speleo Digest, 1963(2):125-126.
- Berra, Tim. 1966. Obstacle avoidance in the blind Mexican characin. Speleo Digest, 1964(2):63-69.
- Bertin, Léon. 1958. Poissons cavernicoles. Traité de Zoologie, 13:2660-2662.
- Bertin, Léon. 1958. Écologie. Traité de Zoologie, 13:1885-1933.
- Bibliowicz, J., A. Alié, Luis Espinasa, M. Yoshizawa, M. Blin, H. Hinaux, L. Legendre, S. Père, and S. Rétaux. 2013. Differences in chemosensory response between eyed and eyeless *Astyanax mexicanus* of the Río Subterráneo cave. AIM 2013 abstracts:34.
- Bibliowicz, J., A. Alié, Luis Espinasa, M. Yoshizawa, M. Blin, H. Hinaux, L. Legendre, S. Père, and S. Rétaux. 2013. Differences in chemosensory response between eyed and eyeless *Astyanax mexicanus* of the Río Subterráneo cave. EvoDevo 4(1):25.
- Bibliowicz, Jonathan, Yannick Elipot, Maryline Blin, and Sylvie Rétaux. 2013. Olfactory evolution in cave- dwelling *Astyanax mexicanus*. AIM 2013 abstracts:37.
- Bilandžija H, Cetković H, Jeffery, W.R. 2012. Evolution of albinism in cave planthoppers by a convergent defect in the first step of melanin biosynthesis. Evol Dev. 2012 Mar-Apr;14(2):196-203. doi: 10.1111/j.1525-142X.2012.00535.x.
- Bilandžija H, Ma L., Parkhurst A., Jeffery, W.R. 2013. A potential benefit of albinism in *Astyanax* cavefish: downregulation of the oca2 gene increases tyrosine and catecholamine levels as an alternative to melanin synthesis. PLoS One. 2013 Nov 25;8(11):e80823. doi: 10.1371/journal.pone.0080823. eCollection 2013.
- Bilandžija, Helena, Mara Laslo, Daniel Fong, William Jeffery. 2015. The loss of body pigmentation has evolved independently in multiple animal taxa that have successfully colonized subterranean habitats. AIM 2015 abstracts:16.
- Bittinger, Steven. 1972. Southern Sierra de Guatemala, Tres Manantiales, Micos. AMCS Newsletter, 3(5):97.
- Blin, M. 2013. Development of the olfactory system in *Astyanax* cavefish and surface fish. AIM 2013 abstracts:
- Blin, Maryline, Eugène Tine, Sylvie Rétaux. 2017. Neurogenesis in the cavefish olfactory epithelium. AIM 2017 posters:43.

- Blin, Maryline, Yoni Bibliowicz, Sylvie Rétaux. 2013. Development of the olfactory system in *Astyanax* cavefish and surface fish. AIM 2013 abstracts:
- Bobadilla, SE. 2013. Genetic structure of *Astyanax mexicanus* at Mexican Atlantic slope. AIM 2013 abstracts.
- Bonaroti, Natalie, Jennifer Rutkowski, Sylvie Rétaux, Emily Collins, Patricia Ornelas García, Carly Heintz, and Luis Espinasa. 2017. A year in the life of two populations of *Astyanax mexicanus*. AIM 2017 abstracts:36.
- Bonet, Federico. 1953. Datos sobre las cavernas y otros fenomenos erosivos de las calizas de La Sierra de El Abra. Congreso Científico Mexicano Mem, (V.) 3, Ciencias Fisicas y Matematicas, Geologia. Pp. 238-266.
- Bonet, Federico. 1953. Cuevas de la Sierra Madre Oriental en la Región de Xilitla. Universidad Nacional Autónoma de México, Instituto de Geología, Boletín No. 57: 96 + 5 plates.
- Bonet, Federico. 1963. Biostratigraphic notes on the Cretaceous of eastern Mexico. Pp. 36-48, in Geology of Peregrina Canyon and Sierra de El Abra, Corpus Christi Geol. Soc. Annual field trip, May 23-26, 1963, 107 pp.
- Bonet, Federico. 1963. Road log, Taninul-Tantobal, May 25, 1963. Pp. 91-96, in Corpus Christi Geol. Soc. Annual field trip, May 23-26, 1963, 107 pp.
- Bonet, Federico. 1963. Road log, Ciudad Valles-Ciudad Victoria, May 26, 1963. Pp. 97- 107, in Corpus Christi Geol. Soc. Annual field trip, May 23-26, 1963, 107 pp.
- Borowsky, Richard. 1996. The Sierra de El Abra of northeastern Mexico: blind fish in the world's largest cave system. Tropical Fish Hobbyist, 44(7):178-186, 188.
- Borowsky, Richard. 2008. Handling *Astyanax mexicanus* eggs and fry Cold Spring Harbor Protocols.
- Borowsky, Richard. 2008. Breeding *Astyanax mexicanus* through natural spawning. Cold Spring Harbor Protocols.
- Borowsky, Richard. 2008. Determining the sex of adult *Astyanax mexicanus*. Cold Spring Harbor Protocols.
- Borowsky, Richard. 2008. *Astyanax mexicanus*, the blind Mexican Cave Fish: A model for studies in development and morphology. Cold Spring Harbor Protocols. 2008 Nov 1; 2008:pdb.emo107. doi: 10.1101/pdb.emo107.
- Borowsky, Richard. 2008. In Vitro fertilization of *Astyanax mexicanus*. Cold Spring Harbor Protocols.
- Borowsky, Richard. 2009. An *Astyanax* community website. Proceedings of the first International *Astyanax* meeting, Ciudad Valles, Mexico:42.
- Borowsky, Richard. 2013. Divergence and Speciation in *Astyanax* of the Sierra El Abra. AIM 2013 abstracts: 13.
- Borowsky, Richard. 2013. Eye regression in blind *Astyanax* cavefish may facilitate the evolution of an adaptive behavior and its sensory receptors. BMC Biol. 2013 Jul 11;11:81. doi: 10.1186/1741-7007-11-81.
- Borowsky, Richard. 2015. Selection or Drift: Critical tests of hypotheses. AIM 2015 abstracts:8.
- Borowsky, Richard. 2015. Regressive evolution: Testing hypotheses of selection and drift. Chapter 5, pp. 93- 109 In: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), Biology and Evolution of the Mexican Cavefish. Academic Press (Elsevier), Amsterdam. 404 pp.
- Borowsky, Richard. 2017. Qtl analysis of sleep in *Astyanax* cavefish. AIM 2017 abstracts:26.
- Borowsky, Richard and D. Cohen. 2013. Genomic consequences of ecological speciation in *Astyanax* cavefish. PLoS One. 2013 Nov 19;8(11):e79903. doi: 10.1371/journal.pone.0079903. eCollection 2013.
- Borowsky, Richard and Horst Wilkens. 2002. Mapping a cave fish genome: polygenic systems and regressive evolution. J Hered. 2002 Jan-Feb;93(1):19-21.
- Borowsky, Richard and Luis Espinasa. 1997. Antiquity and origins of troglobitic Mexican tetras, *Astyanax fasciatus*. <http://www.nyu.edu/gsas/dept/bio/faculty/borowsky/cavepublications/asty.html>. 3 pp.
- Boucquey, C., G. Thinès, and C. Van der Borght. 1965. Étude comparative de la capacité photopathique et de l'activité chez le poisson cavernicole *Anoptichthys antrobius*, chez la forme épigée ancestrale *Astyanax mexicanus*, et chez les hybrides F1 (*Astyanax* X *Anoptichthys*) et F2. Pp. 79-103 in: La distribution temporelle des activités animales et humaines. Paris: Masson et Cie.
- Boudriot F., Reutter K. 2001. Ultrastructure of the taste buds in the blind cave fish *Astyanax jordani* ("*Anoptichthys*") and the sighted river fish *Astyanax mexicanus* (Teleostei, Characidae). J Comp Neurol. 2001 Jun 11;434(4):428-44.
- Bowman, Thomas E. 1982. *Speocirolana pubens* and *S. endeca*, new troglobitic isopod crustaceans from México (Flabellifera: Cirolanidae). Association for Mexican Cave Studies Bulletin, 8:13-23/Texas Memorial Museum Bulletin, 28:13-23.
- Box, Andrew C., Robert Peuß, Jeffrey Haug and Nicolas Rohner. 2017. Immunology without antibodies: studying fish hematopoietic tissue using intrinsic cell signals, image cytometry and advanced analysis methods. AIM 2017 posters:44.
- Boyd, D.C. 1963. Geology of the Golden Lane Trend and related fields of the Tampico embayment. Pp. 49-56, in Corpus Christi Geol. Soc. Annual field trip, May 23- 26, 1963, 107 pp.
- Bradic M., Teotónio H, Borowsky RL. 2013. The population genomics of repeated evolution in the blind cavefish *Astyanax*

- mexicanus*. Mol Biol Evol. 2013 Nov;30(11):2383-400. doi: 10.1093/molbev/mst136. Epub 2013 Aug 8.
- Bradic, M., Beerli, P., Garcia-de Leon, F. J., Esquivel-Bobadilla, S., and Borowsky, R. L. 2012. Gene flow and population structure in the Mexican blind cavefish complex (*Astyanax mexicanus*). BMC Evol Biol 2012, 12:9.
- Bradic, M., Rohner, N., Tabin, C., and R. Borowsky. 2015. Caves with eyed and eyeless populations of *Astyanax*. AIM 2015 abstracts:7.
- Breder, Charles M., Jr. 1942. Descriptive ecology of La Cueva Chica, with especial reference to the blind fish, *Anoptichthys*. Zoologica, New York, 27(3):7-15, pls. 1-3, map.
- Breder, Charles M., Jr. 1943. Problems in the behavior and evolution of a species of blind cave fish. Transactions of the New York Academy of Sciences, series 2, 5:168-176.
- Breder, Charles M., Jr. 1943. Apparent changes in phenotypic ratios of the characins at the type locality of *Anoptichthys jordani* Hubbs and Innes. Copeia, 1943(1):26-30.
- Breder, Charles M., Jr. 1943. A note on erratic viciousness in *Astyanax mexicanus* (Phillipi). Copeia, 1943(2):82-84.
- Breder, Charles M., Jr. 1944. Ocular anatomy and light sensitivity studies on the blind fish from Cueva de los Sabinos, Mexico. Zoologica, New York, 29(13):131-144, pl. 1.
- Breder, Charles M., Jr. 1945. Compensating reactions to the loss of the lower jaw in a cave fish. Zoologica, New York, 30(10):95-100, pl. 1.
- Breder, Charles M., Jr. 1953. Cave fish evolution. Evolution, 7(2):179-181.
- Breder, Charles M., Jr. 1954. A second case of survival by a teleost without a lower jaw. Zoologica, New York, 39(2):13-16, pl. 1.
- Breder, Charles M., Jr. 1959. Studies on social groupings in fishes. Bulletin of the American Museum of Natural History, 117(6):393-482, pls. 70-80.
- Breder, Charles M., Jr, and Donn Eric Rosen. 1966. Modes of reproduction in fishes. New York: The Natural History Press. 951 pp.
- Breder, Charles M., Jr, and Edward B. Gresser. 1941. Correlations between structural eye defects and behavior in the Mexican blind characin. Zoologica, New York, 26(16):123-131, pls. 1-4.
- Breder, Charles M., Jr, and Edward B. Gresser. 1941. Further studies on the light sensitivity and behavior of the Mexican blind characin. Zoologica, New York, 26(28):289-296, pl. 1.
- Breder, Charles M., Jr, and Edward B. Gresser. 1941. Behavior of Mexican cave characins in reference to light and cave entry. (Abstract). Anatomical Record, 81(Supplement):112.
- Breder, Charles M., Jr, and Ethel Hafter Atz. 1952. Conditioned restrictions of movement in fishes, fancied and real. Copeia, 1952(4):261-265.
- Breder, Charles M., Jr, and Florence Halpern. 1946. Innate and acquired behavior affecting the aggregation of fishes. Physiological Zoology, 19:154-190.
- Breder, Charles M., Jr, and Janet Roemhild. 1947. Comparative behavior of various fishes under differing conditions of aggregation. Copeia, 1947(1):29-40.
- Breder, Charles M., Jr, and Priscilla Rasquin. 1943. Chemical sensory reactions in the Mexican blind characins. Zoologica, New York, 28(20):169-200, pls. 1-3.
- Breder, Charles M., Jr, and Priscilla Rasquin. 1947. Comparative studies in the light sensitivity of blind characins from a series of Mexican caves. Bulletin of the American Museum of Natural History, 89(5):319-352.
- Breder, Charles M., Jr, and Priscilla Rasquin. 1947. Evidence for the lack of a growth principle in the optic cyst of Mexican cave fish. Zoologica, New York, 32(3):29-33.
- Bridges, William 1955. No eyes in the darkness. pp. 256-268. IN: C.E. Mohr and H.N. Sloane, eds, Celebrated American caves. Rutgers University Press, New Brunswick.
- Bridges, William. 1940. The blind fish of La Cueva Chica. Bulletin of the New York Zoological Society. 43:74- 97.
- Bridges, William. 1943. What we have learned about blind cave fish. Animal Kingdom, 46:82, 87 -90.
- Brittan, M.R., and J.E. Bohlke 1965. A new blind characid fish from Southeastern Brazil. Notulae Naturae, 380:1-4.
- Broussard, Don. 1969. Trip reports: Los Sabinos area. The UTG News, 6(3):10-12.
- Broussard, Don. 1972. Trip reports: SMO., Sierra de El Abra. June-August 1971. AMCS Newsletter, 3(4):63-64.
- Broussard, Don. 1990. Mexspeleo 1989: A special report: Trip reports: Venadito revisited. The Texas Caver, 35(1):3-5.
- Broussard, Don. 1993. News item about Sótano de Venadito. AMCS Activities Newsletter, 20:21.
- Buckup, PA. 2003. Genus *Astyanax*. Pp. 107-113 in Reis, RE., Kullander, SO and Ferraris, CJ (eds.), Checklist of the freshwater fishes of South and Central America. EDIPUCRS. Porto Alegre.
- Burchards H, Dölle A., Parzefall J. 1985. Aggressive behaviour of an epigeal population of *Astyanax mexicanus* (Characidae, Pisces) and some observations of three subterranean populations. Behav Processes. 1985 Aug;11(3):225-

35. doi: 10.1016/0376-6357(85)90017-8.
- Burchards, H, A. Dölle, and J. Parzefall. 1985. The aggressive behaviour of an epigean population of *Astyanax mexicanus* (Characidae, Pisces) and some observations of three subterranean populations. *Behavioural Processes*, 11:225-235.
- Burchards, H, and J. Parzefall. 1985?. Das Aggressionsverhalten oberirdischer und höhlenlebender Populationen von *Astyanax mexicanus* (Pisces, Characidae) und ihrer Bastarde. *Verh. Dtsch. Zool. Ges*, 78.
- Burgers, A. C. J., P. J. H. Bennink, and G. J. Van Oordt. 1963. Investigations into the regulation of the pigmentary system of the blind Mexican cave fish, *Anoptichthys jordani*. *Proceedings Akademie Van Wetenschappen, Amsterdam*, 66, Sec. C., pp. 189-195, unnumbered pl.
- Burt de Perera, T. 2004. Spatial parameters encoded in the spatial map of the blind mexican cavefish, *Astyanax fasciatus*. *Animal Behaviour*, 68:291-295.
- Burt de Perera, T. 2004. Fish can encode order in their spatial map. *Proc Biol Sci*. 2004 Oct 22;271(1553):2131-4.
- Bussing, W.A. 1985. The Great American biotic interchange. Volume 4. In *Patterns of distribution of the Central American ichthyofauna*. Edited by Stehli FG., Webb SD. New York. Plenum Press; 1985:453–473.
- Caballero-Hernandez, O., Hernandez-Patricio, M., Sigala-Regalado, I, Morales-Malacara, J. B. and Miranda- Anaya, M 2015. Circadian rhythms and photic entrainment of swimming activity in cave-dwelling fish *Astyanax mexicanus* (Actinopterygii: Characidae), from El Sótano de la Tinaja, San Luis Potosí, Mexico *Biological Rhythm Research*, 46: 579-586.
- Cahill, Amy, Maria Yurgel, and Luis Espinasa. 2013. Hybridization and the colonization of the cave environment by fish. *AIM 2013 abstracts*:14.
- Cahn, Phyllis H. 1958. Comparative optic development in *Astyanax mexicanus* and in two of its blind cave derivatives. *Bulletin of the American Museum of Natural History*, 115:69-112.
- Campenhausen, C. von, I. Riess, and R. Weissert. 1981. Detection of stationary objects in the blind cave fish *Anoptichthys jordani* (Characidae). *Journal of Comparative Physiology*, 143A:369-374.
- Campos, H. 1969. Die Geschmacksknospen im Vorderdarm von Süßwasserfischen, Zahl, Verteilung und Entwicklung (*Phoxinus phoxinus* L., *Gasterosteus aculeatus* L., *Hemigrammus caudovittatus* Ahl, *Anoptichthys jordani* Hubbs et Innes und *Salmo gairdneri* Rich.). *Z. Wiss. Zool*, 179:253-299.
- Carlson, B. M., Onusko, S. W. and Gross, J. B. 2015. A high-density linkage map for *Astyanax mexicanus* using genotyping-by-sequencing technology. *G3-Genes Genomes Genetics*, 5:241-251.
- Carlson, B.M., Onusko SW., Gross JB. 2014. A high-density linkage map for *Astyanax mexicanus* using genotyping-by-sequencing technology. *G3 (Bethesda)*. 2014 Dec 17;5(2):241-51. doi: 10.1534/g3.114.015438.
- Carlson, BM., and Gross, JB. 2017. Characterization and comparison of activity profiles exhibited by the cave and surface morphotypes of the blind Mexican tetra, *Astyanax mexicanus*. *Comp Biochem Physiol C Toxicol Pharmacol*. 2017 Aug 18. pii: S1532-0456(17)30148-5. doi: 10.1016/j.cbpc.2017.08.002. [Epub ahead of print]
- Carrillo-Bravo, J. 1971. La plataforma Valles-San Luis Potosí. *Boletín Asociación Mexicana Geol. Petrol*, 23(1-6):1-102.
- Cartwright R.A., Schwartz R.S., Merry A.L., and Howell M.M. 2017. [The importance of selection in the evolution of blindness in cavefish](#). *BMC Evol Biol*. 2017 Feb 7;17(1):45. doi: 10.1186/s12862-017-0876-4.
- Casane, D., Hernandez, D., Garcia, A., Chevalier-Monteagudo, P., Bernathez, L and Garcia-Machado, E. 2009. Molecular phylogeny and phylogeography of Cuban cave fishes (genus *Lucifuga*). *Proceedings of the first International Astyanax meeting, Ciudad Valles, Mexico*:24.
- Casane D, Rétaux S. 2016. Evolutionary genetics of the cavefish *Astyanax mexicanus*. *Adv Genet*. 2016;95:117-59. doi: 10.1016/bs.adgen.2016.03.001. Epub 2016 Jun 13. Review.
- Cetraro, N 2017. Housing protocol and expression of selected autism genes in *Astyanax mexicanus*. *AIM 2017 posters*:45.
- Chakraborty, R. and Nei, M. 1974. Dynamics of gene differentiation between incompletely isolated populations of unequal size. *Theoretical Population Biology*, 5:460-469.
- Chumba Segura, Lizbeth. 1983. Characidae. *Astyanax fasciatus altior*. *Fauna de los Cenotes de Yucatán*, no. 2. 8 pp.
- Coghill LM., Darrin Hulsey C., Chaves-Campos J., García de Leon FJ., Johnson SG. 2014. Next generation phylogeography of cave and surface *Astyanax mexicanus*. *Mol Phylogenet Evol*. 2014 Oct;79:368-74. doi: 10.1016/j.ympev.2014.06.029. Epub 2014 Jul 8.
- Cole, John. 1965. Trip reports: Rancho del Cielo and the Xilitla area, 18-28 December 1965. *The AMCS Newsletter*, 1(12):113-115.
- Colella, G. E. and Robertson, J. C. 2015. Neuromast density and eye degeneration in developing blind cave tetra, *Astyanax mexicanus*. *Integrative and Comparative Biology*, 55: E236-E236
- Collins, Emily, Jennifer Rutkowski, Patricia Ornelas García, Sylvie Rétaux, Nicolas Rohner, and Luis Espinasa. 2017. Divergent evolutionary pathways for aggression and territoriality in *Astyanax* cave fish. *AIM 2017 posters*:46.
- Contreras-Balderas, S. and M. D. L. Lozano-Vilano. 1998. Problemas nomenclaturales de las formas mexicanas del género

- Astyanax* (Pisces: Characidae). *Zoologia Informa*, (38):1–13.
- Coombs, S and Patton, P. 2009. Short-range, sensorimotor adaptations for acquiring spatial knowledge. Proceedings of the first International *Astyanax* meeting, Ciudad Valles, Mexico:41.
- Cooper, John Edward. 1977. Book review notes: Mexican eyeless characin fishes genus *Astyanax*: Environment, distribution and evolution. R.W. Mitchell, W.H. Russell, W.R. Elliott. *NSS News*, 35(10):215.
- Cserna, Z. De. 1961. Tectonic map of Mexico. Geological Society of America.
- Culver, DC. 2009. Caves as evolutionary laboratories and *Astyanax mexicanus* as a model of evolution in caves. Proceedings of the first International *Astyanax* meeting, Ciudad Valles, Mexico:33.
- De Buen, Fernando. 1940. Lista de peces de agua dulce de México. En preparación de su catálogo. *Trabajos de Estación Limnológica de Pátzcuaro*, 2. 66 pp.
- De Buen, Fernando. 1946. Ictiogeografía continental mexicana (I, II, y III). *Revista de la Sociedad Mexicana de Historia Natural*, 7(1-4):87-138.
- de Fraipont, M. 1985. La détection chimique chez *Astyanax mexicanus* (forme cavernicole) en fonction de la densité des groupes. *Ann. Soc. Roy. Zool. Belgique*,
- de Fraipont, M. 1987. La détection chimique chez *Astyanax mexicanus* (Teleostei, Characidae) (forme cavernicole) en fonction de la densité des groupes. *Ann. Soc. R. Zool. Belg.*, 117:63-76.
- de Fraipont, M. 1988. The responses of *Astyanax mexicanus* (Pisces, Characidae, epigean form) to chemical traces of conspecific groups of varying densities. *Mémoires de Biospéologie*, 15:41-48.
- de Fraipont, M. 1992. Réponse d' *Astyanax mexicanus* aux stimulations chimiques provenant de groupes de congénères à différents stades du développement. *Mémoires de Biospéologie*, 19:209-213.
- de Fraipont, M., and G. Thinès. 1985. Responses of the cavefish *Astyanax mexicanus* (*Anoptichthys antrobius*) to the odour of known or unknown conspecifics. *Experientia*.
- de Fraipont, Michelle. 1986. La détection chimique de l'odeur des congénères chez *Astyanax mexicanus* (forme cavernicole). Réponses observées pour des concentrations égales établies à partir de groupes de densités différentes. *Stygologia*, 2(3):276-285.
- de Fraipont, Michelle. 1987. La détection chimique chez *Astyanax mexicanus* (forme cavernicole; Pisces Characidae), en fonction du sexe. *Stygologia*, 3(2):149-159.
- Dearolf, Kenneth. 1956. Survey of North American cave vertebrates. *Proceedings of the Pennsylvania Academy of Science*, 30:201-210.
- Devos, Lucie, Alexandre Alié, and Sylvie Rétaux. 2015. Developmental evolution of the basal forebrain in cavefish. *AIM 2015 abstracts*:13.
- Di Palma F., Kidd C., Borowsky R., Kocher TD. 2007. Construction of bacterial artificial chromosome libraries for the Lake Malawi cichlid (*Metriaclima zebra*), and the blind cavefish (*Astyanax mexicanus*). *Zebrafish*. 2007 Spring;4(1):41-7.
- Dölle, A. 1981. Über Ablauf und Funktion des Aggressionsverhaltens von *Astyanax mexicanus* (Characidae, Pisces) unter Berücksichtigung zweier Höhlenpopulationen. Diploma thesis. Universität Hamburg. 67 pp.
- Dowling, T. E., D. P. Martasian, and W. R. Jeffery. 2002. Evidence for multiple genetic forms with similar eyeless phenotypes in the blind cavefish, *Astyanax mexicanus*. *Molecular Biology and Evolution*, 19:446-455.
- Dowling, Thomas E., David P. Martasian, and William R. Jeffery. 2002. Evidence for multiple genetic forms with similar eyeless phenotypes in the blind cavefish, *Astyanax mexicanus*. *Molecular and Biological Evolution*, 19(4):446-455.
- Dowling, Thomas E., David P. Martasian, and William R. Jeffery. 2002. Evidence for multiple genetic forms with similar eyeless phenotypes in the Blind Cavefish, *Astyanax mexicanus*. *Molecular Biology and Evolution*, 19(4):446-455.
- Duboué, Erik R., and Alex C. Keene. 2015. Investigating the evolution of sleep in the Mexican cavefish. Chapter 15, pp. 291-308 IN: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), *Biology and Evolution of the Mexican Cavefish*. Academic Press (Elsevier), Amsterdam. 404 pp.
- Duboué, Erik R., Borowsky RL., Keene AC. 2012.  $\beta$ -adrenergic signaling regulates evolutionarily derived sleep loss in the Mexican cavefish. *Brain Behavior and Evolution*. 2012;80(4):233-243. doi: 10.1159/000341403. Epub 2012 Aug 22.
- Duboué, Erik R., Keene AC., Borowsky RL. 2011. Evolutionary convergence on sleep loss in cavefish populations. *Current Biology*. 2011 Apr 26;21(8):671-676. doi: 10.1016/j.cub.2011.03.020. Epub 2011 Apr 7.
- Dufton, M., and Franz-Odenaal, TA. 2009. Sensory structures and developmental modules within *Astyanax*. Proceedings of the first International *Astyanax* meeting, Ciudad Valles, Mexico:28.
- Dufton, M., Hall, BK and Franz-Odenaal, T. 2012. Early lens ablation causes dramatic long-term effects on the shape of bones in the craniofacial skeleton of *Astyanax mexicanus* *PLOS ONE.*, 7. <https://doi.org/10.1371/journal.pone.0050308>
- Dufton M, Franz-Odenaal TA. 2015. Morphological diversity in the orbital bones of two teleosts with experimental and natural variation in eye size. *Dev Dyn*. 2015 Mar 26. doi: 10.1002/dvdy.24278. [Epub ahead of print]

- Durand, Jacques Pierre. 1977. Sur la structure oculaire, l'ultrastructure des muscles extrinsèques, des enveloppes de l'oeil et de l'épithélium pigmentaire rétinien de l'*Anoptichthys* (forme aveugle de l' *Astyanax mexicanus*- Characidae, Pisces). *Annales de Spéléologie*, 31:149-161.
- Egar, M. W. 1974. An ultrastructural study of the optic nerve of the blind cave fish. *Anatomical Record*, 178:350.
- Elipot Y., Hinaux H, Callebert J., Launay JM., Blin M., Rétaux S. 2014. A mutation in the enzyme monoamine oxidase explains part of the *Astyanax* cavefish behavioural syndrome. *Nat Commun*. 2014 Apr 10;5:3647. doi: 10.1038/ncomms4647.
- Elipot Y., Hinaux H, Callebert J., Rétaux S. 2013. Evolutionary shift from fighting to foraging in blind cavefish through changes in the serotonin network. *Curr Biol*. 2013 Jan 7;23(1):1-10. doi: 10.1016/j.cub.2012.10.044. Epub 2012 Nov 15.
- Elipot Y., Legendre L., Père S., Sohm F., Rétaux S. 2014. *Astyanax* transgenesis and husbandry: how cavefish enters the laboratory. *Zebrafish*. 2014 Aug;11(4):291-9. doi: 10.1089/zeb.2014.1005. Epub 2014 Jul 8.
- Elliott, William R. 2002. Maps of Sótano del Molino and Sótano del Caballo Moro. *AMCS Activities Newsletter*, 25:96, 98. Available at <http://www.mexicancaves.org>
- Elliott, William R. 1970. El Sótano de Soyate. *The Texas Caver*, April, 15(4):63-66.
- Elliott, William R. 1971. Temperature preferences of aquatic, cave-adapted crustaceans from Central Texas and Mexico. M.S. Thesis. Lubbock: Texas Tech University. v + 47 pp.
- Elliott, William R. 1972. Trip report: July-August 1969. Pp. 129-131 in: Mike Walsh, ed, *Mexican caving of the Southwest Texas Grotto 1966-1971*. San Marcos: Southwest Texas Grotto.
- Elliott, William R. 1973. Cave biology, Texas Tech style. *The Texas Caver*, 18(10):292-296.
- Elliott, William R. 1973. Trip report: 9-16 January 1971. *AMCS Newsletter*, 4(3):79-86.
- Elliott, William R. 1973. Trip reports: 14-23 May 1972. *AMCS Newsletter*, 4(2):50-52.
- Elliott, William R. 1974. Sierra de El Abra and Micos area, San Luís Potosí. 15 May - 8 June 1974. *AMCS Newsletter*, 5(1):19-21.
- Elliott, William R. 1976. Regressive evolution in cavernicoles. *The Texas Caver*, 21(6):100-103.
- Elliott, William R. 1980. Sierra de Guatemala—Project Report. *AMCS Newsletter*, no. 11:20-23.
- Elliott, William R. 1982. Sierra de Guatemala. *AMCS Activities Newsletter*, no. 12:19-23.
- Elliott, William R. 1982. From Elliott on October 19, 1981. [Extract of letter to E.M. Benedict.] *North American Biospeleol. Newsl*, 26-28:6.
- Elliott, William R. 1983. Book review: D.C. Culver, *Cave life evolution and ecology*. *North American Biospeleology Newsletter*, 29:4.
- Elliott, William R. 2004. Protecting caves and cave life. Pp. 458-467 in: Culver, David C. and William B. White (eds.), *Encyclopedia of Caves*. Elsevier Academic Press.
- Elliott, William R. 2013. *Astyanax*: Looking Back 45 Years. *AIM 2013 abstracts*:39.
- Elliott, William R. 2014. Sótano de Yerbaniz. *AMCS Activities Newsletter*, 37:125-130.
- Elliott, William R. 2015. Cave exploration and mapping in the Sierra de El Abra Region. Chapter 1, pp. 9-39 In: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), *Biology and Evolution of the Mexican Cavefish*. Academic Press (Elsevier), Amsterdam. 404 pp.
- Elliott, William R. 2015. Cave biodiversity and ecology of the Sierra de El Abra Region. Chapter 3, pp. 59-76 In: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), *Biology and Evolution of the Mexican Cavefish*. Academic Press (Elsevier), Amsterdam. 404 pp.
- Elliott, William R. 2018. The *Astyanax* Caves of Mexico: Cavefishes of Tamaulipas, San Luís Potosí, and Guerrero. *Association for Mexican Cave Studies, Bulletin 26*.
- Elliott, William R. 2018. Bibliography of *Astyanax* cavefishes. In: Elliott, William R., *The Astyanax Caves of Mexico*. *Association for Mexican Cave Studies, Bulletin 26*.
- Elliott, William R., and R.W. Strandtmann. 1971. New locality records for Rhagidia from Mexican and American caves. *Journal of the Kansas Entomological Society*, 44(4):468-475.
- Elliott, William R., and Robert W. Mitchell. 1973. Temperature preference responses of some aquatic, cave- adapted crustaceans from Central Texas and Northeastern Mexico. *International Journal of Speleology*, 5(2):171-189.
- Enjalbert, H. 1964. Phenomenes karstiques Mexique et au Guatemala. *Bull. Assn. Geog. Francais*, 324-325 (Mai-Juin 1964):30-58.
- Erckens, W. 1981. Analyse von Versuchen zur Erforschung der Grundlagen der tagesperiodischen Aktivitätsverteilung einer ober- und einer unterirdischen Population des *Astyanax mexicanus* (Characidae, Pisces). Ph.D. Dissertation. Universität Münster.
- Erckens, W., and F. Weber. 1976. Rudiments of an ability for time measurement in the cavernicolous fish *Anoptichthys*

- jordani* Hubbs and Innes (Pisces, Characidae). *Experientia*, 32:1297-1299.
- Erckens, W., and W. Martin. 1982. Exogenous and endogenous control of swimming activity in *Astyanax mexicanus* by direct light response and by a circadian oscillator. II. Features of time controlled behaviour of a cave population and their comparison to a epigean ancestral form. *Z. Naturforsch.*, 37(c):1266-1273.
- Erckens, Wilhelmine. 1981. The activity controlling time-system in epigean and hypogean populations of *Astyanax mexicanus* (Characidae, Pisces). Proceedings of the Eighth International Congress of Speleology, Bowling Green, Kentucky, U.S.A., July 18 to 24, 1981, 2:796-797.
- Espinasa, L. and G. Giribet. 2009. Living in the dark—species delimitation based on combined molecular and morphological evidence in the nicoletioid genus *Texoreddellia* Wygodzinsky, 1973 (Hexapoda: Zygentoma: Nicoletiidae) in Texas and México. *Texas Memorial Museum Speleological Monographs*, 7, 87-110.
- Espinasa, Luis. 2001. Agressive behavior and blindness: The cave of troglobitic “*Astyanax*” populations. Brazil ISB:29-30.
- Espinasa, Luis. 2009. Map of Cueva de El Pachón. P. 16 in *Astyanax* International Meeting Program, March 15-18, 2009, Ciudad Valles, Mexico. 49 pp.
- Espinasa, Luis. 2011. Promoting undergraduate research in large classrooms: Guerrero cave *Astyanax* - Old or young colonization? AIM meeting 2011:30.
- Espinasa, Luis. 2013. Paradigm shifts and pendulum swings regarding the origin of *Astyanax* cavefish: What about geology? AIM 2013 abstracts:16.
- Espinasa, Luis and Jeffery, William R. 2006. Conservation of retinal circadian rhythms during cavefish eye degeneration. *Evol Dev.* 2006 Jan-Feb;8(1):16-22.
- Espinasa, Luis and Monika Espinasa. 2015. Hydrogeology of caves in the Sierra de El Abra Region. Chapter 2, pp. 41-58 In: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), *Biology and Evolution of the Mexican Cavefish*. Academic Press (Elsevier), Amsterdam. 404 pp.
- Espinasa, Luis and Richard Borowsky 2001. Origins and relationship of blind cave populations of the Blind
- Espinasa, Luis and Richard Borowsky. 2000. Eyed cave fish in a karst window. *Journal of Cave and Karst Studies*, 62(3):180-183.
- Espinasa, Luis and William Jeffery. 2013. Caballo Moro breaks Dollo’s law: Recuperation of vision in a blind cavefish population. AIM 2013 abstracts: 20.
- Espinasa, Luis, Bibliowicz J., William R. Jeffery, Sylvie Rétaux. 2014. Enhanced prey capture skills in *Astyanax* cavefish larvae are independent from eye loss. *Evodevo*. 2014 Oct 3;5:35. doi: 10.1186/2041-9139-5-35. eCollection 2014.
- Espinasa, Luis, Bonaroti, N., Wong, J., Pottin, K., Queinsec, E and Retaux, S. 2017. Contrasting feeding habits of post-larval and adult *Astyanax* cavefish. *Subterranean Biology*, 21:1-17.
- Espinasa, Luis, Centone, Danielle M. and Gross, Joshua B. 2014. A contemporary analysis of a loss-of-function oculocutaneous albinism type II (Oca2) allele within the Río Subterráneo *Astyanax* cavefish population. *Speleobiology Notes*, 6:48-54.
- Espinasa, Luis, Nicole D. Bartolo, and Catherine E. Newkirk. 2014. DNA sequences of troglobitic nicoletioid insects support Sierra de El Abra and the Sierra de Guatemala as a single biogeographical area: Implications for *Astyanax*. *Subterranean Biology* 13: 35–44 (2014) doi: 0.3897/subtbiol.13.7256 www.pensoft.net/journals/subtbiol
- Espinasa, Luis, Patricia Rivas-Manzano, and Héctor Espinosa Pérez. 2001. A new blind cave fish population of genus *Astyanax*: Geography, Morphology and Behavior. *Environmental Biology of Fishes*. 62: 339-344.
- Espinasa, Luis, Yoshiyuki Yamamoto, and William R. Jeffery. 2005. Non-optical releasers for aggressive behavior in blind and blinded *Astyanax* (Teleostei, Characidae). *Behavioral Processes*. 2005 Sep 30;70(2):144-148.
- Espinasa-Pereña, Ramón. 1994. Mexican caving in Guerrero, a history. *Speleo Digest*, 1993:327-328.
- Espinasa-Pereña, Ramón. 2004. El Resumidero de Zacatecolotla. Monografía No 1, Sociedad Mexicana de Exploraciones Subterráneas, Agosto 2004. 24 pp.
- Esquivel Bobadilla, S., Borowsky, RL., Espinosa Perez, H and Garcia de Leon, FJ. 2009. Microsatellite polymorphisms of *Astyanax mexicanus* at Mexican Atlantic slope. Proceedings of the first International *Astyanax* meeting, Ciudad Valles, Mexico:23.
- Esquivel Bobadilla, Sarai, Francisco J. García de León, Richard Borowsky. 2013. Genetic structure of *Astyanax mexicanus* at Mexican Atlantic slope. AIM 2013 abstracts:15.
- Evans, T. R. 1965. Trip reports. AMCS Newsletter, 1:1-113.
- Fack, H, and H. Wilkens. 1989. Eye reduction in hybrids and a naturally variable cave form of *Astyanax fasciatus* (Characidae, Pisces). *Mem. Biospeol*, 16:157-161.
- Felice, Vanessa, Visconti, Maria Aparecida and Trajano, Eleonora. 2008. Mechanisms of pigmentation loss in subterranean fishes. *Neotropical Ichthyology*, 6:657-662.
- Fish, John. 1966. Trip reports: 6-10 April 1966. AMCS Newsletter, 2(2):29- 33.



- Fish, John. 1971. Karst geomorphology and hydrology of the Sierra de El Abra, San Luis Potosí and Tamaulipas, Mexico. (Abstract) *Caves and Karst*, 13(5):40.
- Fish, John. 1974. La Sistema de Los Sabinos. Mexico's longest cave. *The Canadian Caver*, 6(1):3-20.
- Fish, John. 1977. Karst hydrogeology and geomorphology of the Sierra de El Abra and the Valles-San Luis Potosi region, Mexico. Ph.D. Thesis. Hamilton, Ontario: McMaster University. xvii + 469 pp.
- Fish, John. 1978. El Sótano de Japonés, Mexico. *The Canadian Caver*, 10(1):1-2, map.
- Fish, John. 2004. Karst Hydrology of the Sierra de El Abra, Mexico. *Association for Mexican Cave Studies, Bulletin* 14, 186 pp.
- Franck, A. 1962. Mexicanische Höhlencharaciniden im Vergleich zu ihren oberirdischen Vorfahren. Staatsexamenarbeit der Universität Hamburg.
- Franck, A. 1964. Vergleichende Untersuchungen am Höhlenfisch *Anoptichthys antrobius* und seinem oberirdischen Vorfahren *Astyanax mexicanus*. *Zool. Anz*, 172:95-107.
- Franck, Annelotte. 1964. Vergleichende Untersuchungen am Höhlenfisch *Anoptichthys antrobius* und seinem oberirdischen Vorfahren *Astyanax mexicanus*. *Zoologischer Anzeiger*, 172(2):95-107.
- Frank, Stanislav. 1960. *Anoptichthys jordani* Hubbs a Innes 1936. *Akvárium a terárium*, 3(3):39-41.
- Frank, Stanislav. 1961. A morphological study about blind cave fish *Anoptichthys jordani*. *Vestnik Ceskoslovenske Zoologicke Spolecnosti*, 25(4):347-365, 5 pls.
- Frank, Stanislav. 1968. Der Augenlose. Der blinde Höhlensalmmler kommt nicht blind zur Welt. *Aquarien Magazin*, 7:299-301.
- Frank, Stanislav. 1969. Blind geboren? Entwicklung und Rückbildung des Auges bei einem blinden Höhlensalmmler. *Mikrokosmos*, 1:11-13.
- Franz-Odendaal, TA and Hall, BK. 2006. Modularity and sense organs in the blind cavefish, *Astyanax mexicanus*. *Evolution and Development*, 8:94-100.
- Fricke, D. 1985. Die Alarmreaktionen bei Höhlen- und Flussfischpopulationen von *Astyanax mexicanus* (Pisces, Characidae). Unveröff. Diplomarbeit Universität Hamburg.
- Fricke, D. 1988. Alarmreaktion und Schwarmverhalten bei ober- und unterirdisch lebenden Populationen der Art *Astyanax fasciatus* (Cuvier, 1819) und ihrer Bastarde (Characidae, Pisces). Unveröff. Dissertation. Universität Hamburg.
- Fricke, Diethard, and Jakob Parzefall. 1989. Alarm reaction, aggression and schooling in cave and river populations of *Astyanax fasciatus* (Pisces, Characidae) and their hybrids. *Mémoires de Biospéologie*, 16:177- 182.
- Fricke, Diethard. 1988. Reaction to alarm substance in cave populations of *Astyanax fasciatus* (Characidae, Pisces). *Ethology*, 76:305-308.
- Friedman, Libby Rosenbloom. 1962. A study of normal and malignant thymus tissue of the teleost *Astyanax mexicanus* in tissue culture. *Bulletin of the American Museum of Natural History*, 124(3):69-100, pls. 39-51.
- Frühbeis, B. 1984. Verhaltensphysiologische Untersuchungen zur Frequenzunterscheidung und Empfindlichkeit durch das Seitenlinienorgan des blinden Höhlenfisches *Anoptichthys jordani* (Hubbs et Innes). Dissertation, Universität Mainz.
- Fumey, Julien, Hélène Hinaux, Céline Noiro, Sylvie Rétaux, and Didier Casane. 2015. Evidence of Late Pleistocene origin of *Astyanax mexicanus* cavefish. *AIM 2015 abstracts*:10.
- Furterer, Allison, Brian M. Carlson, Bethany A. Stahl, and Joshua B. Gross. 2013. An integrated transcriptome- wide analysis of cave and surface dwelling *Astyanax mexicanus*. *AIM 2013 abstracts*:17
- Gallo ND., and Jeffery, W.R. 2012. Evolution of space dependent growth in the teleost *Astyanax mexicanus*. García, Oscar M., Ana Santacruz, Victor H. Reynoso, and Ernesto Maldonado. 2015. Spatial memory experiments in *Astyanax mexicanus*. *AIM 2015 abstracts*:22.
- García-González, Oscar Manuel and Fausto Arellano-Carbajal. 2013. Isolation and characterization of V1r pheromone receptor gene in cave and surface variants of *Astyanax mexicanus*. *AIM 2013 abstracts*:34.
- Gertychowa, R. 1970. Studies on the ethology and space orientation of the blind cave fish *Anoptichthys jordani* Hubbs et Innes 1936 (Characidae). *Folia Biol*, 18:9-69.
- Gertychowa, Roza. 1971. Heliotaktyzm mlodych rybek jaskiniowych *Anoptichthys jordani* Hubbs et Innes. *Przegląd Zoologiczny*, 15(1):66-69.
- Glaser, D. 1965. Untersuchungen über die absoluten Geschmacksschwellen von Fischen (*Phoxinus phoxinus* L., *Gasterostus aculeatus* L., *Hemigrammus caudovittatus* Ahl und *Anoptichthys jordani* Hubbs et Innes). Diss. Giessen.
- Goettert, L. 1962. Orientierungsmöglichkeiten beim augenlosen Höhlenfisch (*Anoptichthys jordani*). *Naturwissenschaftliche Rundschau*, 15:56-58.
- Goodrick, Charles L. 1962. Differential adaptation of activity in the blind cave fish, *Anoptichthys jordani*. *Perceptual and Motor Skills*, 14:10.

- Gore, Aniket V., Tomins, Kelly A., Iben, James, Ma, Li, Castranova, Daniel, Andrew, Davis, Parkhurst, Amy, Jeffery, William R. and Weinstein, Brant M. 2017. An epigenetic mechanism for cavefish eye degeneration. bioRxiv preprint first posted online Oct. 5, 2017. <http://dx.doi.org/10.1101/199018>
- Granados García, Clemente E., Omar Alvarez Toledano, and Luis Espinasa-Pereña. 1997. Colonization of the cave environment and troglotic evolution by species of the genus *Astyanax* (Pisces: Characidae). (Abstract). New York University,
- Granados García, Clemente E., Omar Alvarez Toledano, and Luis Espinasa-Pereña. 1998. Modificaciones conductuales en peces troglomórficos del género *Astyanax* de la Gruta de las Granadas, Guerrero. (Abstract). Pp. 28-29 in: Programa y Resúmenes, IV Congreso Nacional Mexicano de Espeleología, 4 al 7 de diciembre de 1998, Tehuacán, Puebla.
- Gregson, J. N. S. and Burt de Perera, T. 2007. Shoaling in eyed and blind morphs of the characin *Astyanax fasciatus* under light and dark conditions. *Journal of Fish Biology*, 70:1615-1619.
- Gresser, E. B., and C. M. Breder, Jr. 1940. The histology of the eye of the cave characin, *Anoptichthys*. *Zoologica*, New York, 25(10):113-116, pls. I- III.
- Griffith, L. S., M. G. Pitcher, and G. W. Rice. 1969. Quantitative environmental analysis of a Lower Cretaceous reef complex. Pp: in *Depositional environments in carbonate rocks* (G. M. Friedman, ed.), Spec. Publ. Soc. Econ. Paleontol. And Minerol, 14.
- Grimholt U, Tsukamoto K, Azuma T, Leong J, Koop BF, Dijkstra JM. 2015. A comprehensive analysis of teleost MHC class I sequences. *BMC Evol Biol*. 2015 Mar 6;15:32. doi: 10.1186/s12862-015-0309-1.
- Grobbel, G., and G. Hahn. 1958. Morphologie und Histologie der Seitenorgane des augenlosen Höhlenfisches *Anoptichthys jordani* im vergleich zu anderen Teleostern. *Z. Morph. u Ökol. Tiere*, 47:249-266.
- Gross, Joshua B. 2012. The complex origin of *Astyanax* cavefish. *BMC Evolutionary Biology* 2012, 12:105. <http://www.biomedcentral.com/1471-2148/12/105>
- Gross, Joshua B. 2015. Craniofacial evolution in blind Mexican cavefish. *AIM 2015 abstracts*:14.
- Gross, Joshua B. 2016. Convergence and parallelism in *Astyanax* cave-dwelling fish Pp. 105-119 in Pontarotti, P. (ed.), *Evolutionary Biology*, Springer, DOI 10.1007/978--3-319-41324-27
- Gross, Joshua B. 2017. Evolution and development of cranial asymmetry in *Astyanax* cavefish. *AIM 2017*:34.
- Gross, Joshua B. and Horst Wilkens. 2013. Albinism in phylogenetically and geographically distinct populations of *Astyanax* cavefish arises through the same loss-of-function *Oca2* allele. *Heredity* (Edinb). 2013 Aug;111(2):122-30. doi: 10.1038/hdy.2013.26. Epub 2013 Apr 10.
- Gross, Joshua B., Amanda J. Krutzler, and Luis Espinasa. 2013. An analysis of structural mutations in the gene *Mc1r* in surface and Granadas cave-dwelling *Astyanax aeneus*. *AIM 2013 abstracts*:19.
- Gross, Joshua B., and Amanda K. Powers. 2015. The evolution of the cavefish craniofacial complex. Chapter 10, pp. 193-207. In: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), *Biology and Evolution of the Mexican Cavefish*. Academic Press (Elsevier), Amsterdam. 404 pp.
- Gross, Joshua B., and Michael Matthews. 2013. An analysis of gene expression level changes across development in surface and cave-dwelling fish. *AIM 2013 abstracts*:12.
- Gross, Joshua B., B. Meyer, and M. Perkins. 2015. The rise of *Astyanax* cavefish. *Dev Dyn*. 2015 Jan 20. doi: 10.1002/dvdy.24253. [Epub ahead of print]
- Gross, Joshua B., Borowsky R., Tabin CJ. 2009. A novel role for *Mc1r* in the parallel evolution of depigmentation in independent populations of the cavefish *Astyanax mexicanus*. *PLoS Genetics*. 2009 Jan;5(1):e1000326. doi: 10.1371/journal.pgen.1000326. Epub 2009 Jan 2.
- Gross, Joshua B., Furterer A., Carlson BM., Stahl BA. 2013. An integrated transcriptome-wide analysis of cave and surface dwelling *Astyanax mexicanus*. *PLoS One*. 2013;8(2):e55659. doi: 10.1371/journal.pone.0055659. Epub 2013 Feb 6.
- Gross, Joshua B., Gangidine, A and Powers, A. K. 2016. Asymmetric facial bone fragmentation mirrors asymmetric distribution of cranial neuromasts in blind Mexican cavefish. *Symmetry*, 8:118. doi:10.3390/sym8110118
- Gross, Joshua B., Krutzler AJ., Carlson BM. 2014. Complex craniofacial changes in blind cave-dwelling fish are mediated by genetically symmetric and asymmetric loci. *Genetics*. 2014 Apr;196(4):1303-19. doi: 10.1534/genetics.114.161661. Epub 2014 Feb 4. PMID: PMC3982692.
- Gross, Joshua B., Powers, A. K., Davis, E. M. and Kaplan, S. A. 2016. A pleiotropic interaction between vision loss and hypermelanism in *Astyanax mexicanus* cave x surface hybrids. *BMC Evolutionary Biology*,16:145. DOI 10.1186/s12862-016-0716-y
- Gross, Joshua B., Protas M., Conrad M., Scheid P.E., Vidal O., Jeffery W.R., Borowsky R., Tabin CJ. 2008. Synteny and candidate gene prediction using an anchored linkage map of *Astyanax mexicanus*. *Proceedings of the National Academy of Sciences, U S A*. 2008 Dec 23;105(51):20106-11. doi: 10.1073/pnas.0806238105. Epub 2008 Dec 22.
- Gross, Joshua B., Richard Borowsky, and C.J. Tabin. 2009. A novel role for *Mc1r* in the parallel evolution of

- depigmentation in independent populations of the cavefish *Astyanax mexicanus*. PLoS Genetics, 5(1), e10000326.
- Gross, Joshua B., Stahl, B. A., Powers, A. K. and Carlson, B. M. 2016. Natural bone fragmentation in the blind cave-dwelling fish, *Astyanax mexicanus*: candidate gene identification through integrative comparative genomics. Evolution & Development, 18:7-18.
- Gross Joshua B., Weagley J., Stahl B.A., Ma L., Espinasa L., and McGaugh S.E. 2017. [A local duplication of the Melanocortin receptor 1 locus in Astyanax](#). Genome. 2017 Jul 24:1-12. doi: 10.1139/gen-2017-0049. [Epub ahead of print]
- Grunewald-Lowenstein, M. 1956. Influence of light and darkness on the pineal body in *Astyanax mexicanus*. Zoologica, New York, 41:119-128.
- Guibal, C., Yamamoto, Y., Reynoso, VH and Whitmore, D. 2009. Biological clocks in *Astyanax mexicanus*. Proceedings of the first International *Astyanax* meeting, Ciudad Valles, Mexico:35.
- Hahn, G. 1957. Ferntastsinn und Strömungssinn beim augenlosen Höhlenfisch, *Anoptichthys jordani* Hubbs und Innes, und das Problem der Rezeptionsorte von Lichtreizen. Diss. Köln. 81 pp.
- Hahn, Gottfried. 1960. Ferntastsinn und Strömungssinn beim augenlosen Höhlenfisch *Anoptichthys jordani* Hubbs und Innes im Vergleich zu einigen anderen Teleosteern. Die Naturwissenschaften, 24:611-612.
- Haspel, G., Schwartz, A., Streets, A., Camacho, D. E., and Soares, D. 2012. By the teeth of their skin, cavefish find their way. Current Biology, 22:R629-R630.
- Hassan, El-Sayad. 1986. On the discrimination of spatial intervals by the blind cave fish (*Anoptichthys jordani*). Journal of Comparative Physiology, 159A:701-710.
- Hausberg, C. 1995. Das aggressionsverhalten von *Astyanax fasciatus* (Cuvier 1819) (Characidae, Teleostei): Ontogeni, Genetik und Evolution bei der epigidischen und hypogäischen Form. Dissertation. Hamburg: Fachbereich Biologie. 139 pp.
- Hausdorf, B., Wilkens, H, and Strecker, U. 2011. Population genetic patterns revealed by microsatellite data challenge the mitochondrial DNA based taxonomy of *Astyanax* in Mexico (Characidae, Teleostei). Molecular Phylogenetics and Evolution. 2011 Jul;60(1):89-97. doi: 10.1016/j.ympev.2011.03.009. Epub 2011 Mar 16.
- Heim, A. 1940. The front ranges of the Sierra Madre Oriental, Mexico, from Ciudad Victoria to Tamazunchale. Eclogae Geologicae Helvetiae, 33:313-352.
- Herman, Adam, William H. Jeffery, Richard Borowsky, Yaniv Brandvain, Helena Bilandžija, Luis Espinasa, Kelly O'Quin, Claudia Ornelas-García, Erin Gilbertson, Courtney Passow, Masato Yoshizawa, Wes Warren, Suzanne E. McGaugh. 2017. Population genomics in *Astyanax*. AIM 2017:23
- Herrera García, Andrea, Pedraza-Lara, Carlos, and Ornelas-García, C. Patricia. 2015. Phylogeography of *Astyanax* aff. *mexicanus* (De Fillipi, 1835) (Characidae) in surface and cave populations. AIM 2015 Herwig HJ. 1976. Comparative ultrastructural investigations of the pineal organ of the blind cave fish, *Anoptichthys jordani*, and its ancestor, the eyed river fish, *Astyanax mexicanus*. Cell Tissue Res. 1976 Apr 2;167(3):297-324.
- Herwig, Hendrik Johannes. 1981. The pineal organ. An ultrastructural and biochemical study on the pineal organ of *Hemigrammus caudovittatus* and other closely related characid fish species with special reference to the Mexican blind cave fish, *Astyanax mexicanus*. Ph.D. Diss. Rijksuniversiteit te Utrecht.
- Herwig, Hendrik. Johannes. 1976. Comparative ultrastructural investigations of the pineal organ of the blind cave fish, *Anoptichthys jordani*, and its ancestor, the eyed river fish, *Astyanax mexicanus*. Cell and Tissue Research, 167:297-324.
- Heuts, M.J. 1953. Comments on "Cave fish evolution". Evolution, 7: 391-392.
- Hinaux, Hélène, Devos L, Blin M, Elipot Y, Bibliowicz J, Alié A, Rétaux S. 2016. [Sensory evolution in blind cavefish is driven by early embryonic events during gastrulation and neurulation](#). Development. 2016 Dec 1;143(23):4521-4532.
- Hinaux, Hélène, Pottin, K., Chalhoub, H, Père, S., Elipot, Y., Legendre, L., Rétaux, S. 2011. A developmental staging table for *Astyanax mexicanus* surface fish and Pachón cavefish. Zebrafish. 2011 Dec;8(4):155-65. doi: 10.1089/zeb.2011.0713.
- Hinaux, Hélène, Recher, G., Alie, A., Legendre, L., Blin, M. and Retaux, S. 2017. Lens apoptosis in the *Astyanax* blind cavefish is not triggered by its small size or defects in morphogenesis. PLOS ONE., <https://doi.org/10.1371/journal.pone.0172302>
- Hinaux, Hélène and Sylvie Rétaux. 2011. Placode development in *Astyanax mexicanus* blind cavefish and sighted surface fish. AIM meeting 2011: 20.
- Hinaux, Hélène, Blin M., Fumey J., Legendre L., Heuzé A., Casane D., Rétaux S. 2015. Lens defects in *Astyanax mexicanus* Cavefish: Evolution of crystallins and a role for alphaA-crystallin. Dev Neurobiol. 2015 May;75(5):505-21. doi: 10.1002/dneu.22239. Epub 2014 Nov 4.
- Hinaux, Hélène, Gaëlle Recher, Maryline Blin, Lucie Devos, Alexandre Alié, Sylvie Rétaux. 2015. Sensory evolution in blind cavefish is driven by early embryonic events during gastrulation and neurulation. AIM 2015 abstracts:19.

- Hinaux, H el ene, Julie Poulain, Corinne Da Silva, C eline Noirot, William R Jeffery, Didier Casane, and Sylvie R etaux. 2013. Transcriptome analysis in *Astyanax mexicanus* blind cavefish and sighted surface fish. AIM 2013 abstracts:11.
- Hinaux, H el ene, Poulain J., Da Silva C., Noirot C., Jeffery W.R., Casane D., R etaux S. 2013. De novo sequencing of *Astyanax mexicanus* surface fish and Pach on cavefish transcriptomes reveals enrichment of mutations in cavefish putative eye genes. PLoS One. 2013;8(1):e53553. doi: 10.1371/journal.pone.0053553. Epub 2013 Jan 9.
- Hinaux, H el ene, Sylvie R etaux and Yannick Elipot. 2015. Social behavior and aggressiveness in *Astyanax*. Chapter 17, pp. 335-359 IN: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), *Biology and Evolution of the Mexican Cavefish*. Academic Press (Elsevier), Amsterdam. 404 pp.
- Hoffmann, S., and C. Hausberg. 1993. The aggressive behaviour of the Micos cave population (*Astyanax fasciatus*, Characidae, Teleostei) after selection for functional eyes in comparison to an epigean one. M emoires de Sp eleologie, 20:101-103.
- Hofmann, S., and C. Hausberg. 1992. The aggressive behaviour of the Micos-cave population (*Astyanax fasciatus*) after selection for functional eyes in comparison to an epigean one. (Abstract). P. 83 in: Program & Abstracts, International Symposium of Biospeleology, Soci et  de Biosp eologie, Tenerife – Canary Islands 7-12 September 1992.
- Hofmann, S., and C. Hausberg. 1993. The aggressive behaviour of the Micos cave population (*Astyanax fasciatus*, Characidae, Teleostei) after selection for functional eyes in comparison to an epigean one. Memoires de Biospeologie, 20:101-103.
- Hoke, K., Schwartz, A., and Soares, D. 2012. Evolution of the fast start response in the cavefish *Astyanax mexicanus*. Behav Ecol Sociobiol, 66:1157-1164.
- Holbrook, R and Burt de Perera, T. 2009. Spatial orientation of two morphs of *Astyanax fasciatus* Proceedings of the first International *Astyanax* meeting, Ciudad Valles, Mexico:39.
- Holbrook, R., Bomphrey, R., Walker, S., Taylor, G., Thomas, A and Burt de Perera, T. 2007. Swimming performance of a subcarangiform, the blind Mexican cave fish (*Astyanax fasciatus*). Comparative Biochemistry and Physiology, 146A:S119.
- Holbrook, R., Bomphrey, R., Walker, S., Taylor, G., Thomas, A and Burt de Perera, T. 2008. A comparative analysis of the normal swimming performance of two subcarangiforms, blind Mexican cave fish (*Astyanax fasciatus*) and goldfish (*Carassius auratus*). Comparative Biochemistry and Physiology, 150A:S70-S71.
- Holzman, Roi, Perkol-Finkel, Shimrit and Zilman, Gregory 2014. Mexican blind cavefish use mouth suction to detect obstacles. Journal of Experimental Biology, 217:1955-1962.
- Hooven TA., Yamamoto Y., Jeffery, W.R. 2004. Blind cavefish and heat shock protein chaperones: a novel role for hsp90alpha in lens apoptosis. Int J Dev Biol. 2004;48(8-9):731-8.
- Hubbs, Carl L. 1938. Fishes from the caves of Yucatan. Carnegie Institution of Washington Publication, no. 491:261-295, pls. 1-4.
- Hubbs, Carl L., and William T. Innes. 1936. The first known blind fish of the family Characidae: A new genus from Mexico. Occasional Papers of the Museum of Zoology, University of Michigan, no. 342. 7 pp, 1 pl.
- Humbach, I. 1960. Geruch und Geschmack bei den augenlosen H hlenfischen *Anoptichthys jordani*, Hubbs und Innes und *Anoptichthys hubbsi*, Alvarez. Inaug. Diss. K ln. 88 pp.
- Humbach, Ilse. 1960. Geruch und Geschmack bei den augenlosen H hlenfischen *Anoptichthys jordani*, Hubbs und Innes und *Anoptichthys hubbsi*, Alvarez. (Abstract). Die Naturwissenschaften, 23:551-552.
- H ppop, Kathrin, and Horst Wilkens. 1991. Bigger eggs in subterranean *Astyanax fasciatus* (Characidae, Pisces). Their significance and genetics. Zeitschrift f r Zoologische Systematik und Evolutionsforschung, 29:280-288.
- H ppop, Kathrin. 1986. Oxygen consumption of *Astyanax fasciatus* (Characidae, Pisces): a comparison of epigean and hypogean populations. Environmental Biology of Fishes, 17(4):299-308.
- H ppop, Kathrin. 1986. Genetic analysis of oxygen consumption rate in cave and surface fish of *Astyanax fasciatus* (Characidae, Pisces), further support for the neutral mutation theory. Mem. Biospeol, 16:163-168.
- H ppop, Kathrin. 1987. Food-finding ability in cave fish (*Astyanax fasciatus*). International Journal of Speleology, 16:59-66.
- H ppop, Kathrin. 1988. Ph nomene und Bedeutung der Energieersparnis beim H hlensalmier *Astyanax fasciatus*. Dissertation. Universit t Hamburg.
- H ppop, Kathrin. 1989. Food-finding ability in cave fish (*Astyanax fasciatus*). (Abstract). Notas de la Informaci n Bioespeleol gica de Am rica Latina y el Caribe, 2:1.
- Hyacinthe, Carole, Jo l Attia, Cynthia Froc, and Sylvie R etaux. 2017. Evolution of acoustic communication in the blind cavefish *Astyanax mexicanus*. AIM 2017:21.
- Hykes, O.V. 1937. *Anoptichthys jordani*, Hubbs und Innes. Akvaristick  listy, 11:108-109.
- Innes, William T. 1937. A cavern characin *Anoptichthys jordani*, Hubbs & Innes. Aquarium, Philadelphia, 5(10):200-202.

- Instituto Nacional de Estadística, Geografía e Informática (INEGI). 2014. GIS map coverages. <http://www.inegi.org.mx/>
- Jaggard, James, Beatriz G. Robinson, Bethany A. Stahl, Ian Oh, Pavel Masek, Masato Yoshizawa, and Alex C. Keene. 2017. The lateral line confers evolutionarily derived sleep loss in the Mexican cavefish. *AIM* 2017:14
- Jaggard, James, Beatriz G. Robinson, Bethany A. Stahl, Ian Oh, Pavel Masek, Masato Yoshizawa, and Alex C. Keene. 2017. The lateral line confers evolutionarily derived sleep loss in the Mexican cavefish. *J Exp Biol.* 2017 Jan 15;220(Pt 2):284-293. doi: 10.1242/jeb.145128.
- Jaggard, James, Beatriz G. Robinson, Ian Oh, Pavel Masek, Masato Yoshizawa, Alex Keene. 2015. Distinct neural mechanisms underlie the convergent evolution of sleep loss in the Mexican cavefish. *AIM 2015 posters*:34.
- Jankowska M., Thines G. 1982. Etude comparative de la densite de groupes de poissons cavernicoles et epiges (characidae, cyprinidae, clariidae). *Behav Processes.* 1982 Dec;7(4):281-94. doi: 10.1016/0376- 6357(82)90001-8.
- Janson X., Kerans C., Loucks R., Marhx MA., Reyes C., Murguia F. 2011. Seismic architecture of a Lower Cretaceous platform-to-slope system, Santa Agueda and Poza Rica fields, Mexico. *AAPG Bull* 2011, 95:105–146.
- Jeffery, William R. 1996. Regressive evolution of eye development in the cavefish *Astyanax* (Abstract). *American Zoologist*, 36(5):78A.
- Jeffery, William R. 2001. Cavefish as a model system in evolutionary developmental biology. *Dev Biol.* 2001 Mar 1;231(1):1-12. Review.
- Jeffery, William R. 2005. Adaptive evolution of eye degeneration in the Mexican blind cavefish. *J Hered.* 2005 May-Jun;96(3):185-96. Epub 2005 Jan 13. Review.
- Jeffery, William R. 2008. Jeffery, William R. 2009. Regressive evolution in *Astyanax* cavefish. *Annual Review of Genetics.* 2009;43:25-47. doi: 10.1146/annurev-genet-102108-134216. Review.
- Jeffery, William R. 2009. Evolution and development in the cavefish *Astyanax*. *Current Topics in Developmental Biology.* 2009; 86:191-221 (Chap 8) doi: 10.1016/S0070-2153(09)01008-4.
- Jeffery, William R. 2009. AIM 2009: The first international *Astyanax* meeting. *Proceedings of the first International Astyanax meeting, Ciudad Valles, Mexico*:19.
- Jeffery, William R. 2009. Evolution and development in the cavefish *Astyanax* *Current Topics in Developmental Biology*, 86:191-221.
- Jeffery, William R. 2009. Regressive evolution in *Astyanax* cavefish. *Annual Reviews of Genetics.* 43:25- 47.
- Jeffery, William R. 2015. Concluding Remarks: The *Astyanax* Community. *Concluding Remarks*, pp.393-396 In: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), *Biology and Evolution of the Mexican Cavefish.* Academic Press (Elsevier), Amsterdam. 404 pp.
- Jeffery, William R. 2016. The comparative organismal approach in evolutionary developmental biology: insights from ascidians and cavefish. *Curr Top Dev Biol*, 116: 489-500.
- Jeffery, William R. and Yamamoto, Y. 2001. Midline signaling by sonic hedgehog controls eye degeneration in *Astyanax* cavefish. *Brazil ISB*:34.
- Jeffery, William R., A.E. Strickler, S. Guiney, D.G. Heyser, and S.I. Tomarev. 2000. Prox1 in eye degeneration and sensory organ compensation during development and evolution of the cavefish *Astyanax* *Dev. Genes Evol*, 210:223-230.
- Jeffery, William R., and David P. Martasian. 1998. Evolution of eye regression in the cavefish *Astyanax*: Apoptosis and the pax-6 gene. *American Zoologist*, 38(4):685-696.
- Jeffery, William R., K. Hornaday, and D. P. Martasian. 1996. Eye development in the cavefish *Astyanax*: Role of programmed cell death and the Pax-6 gene. (Abstract). *Biochemical Society Transactions*, 24(4):549S.
- Jeffery, William R., Li Ma, Amy Parkhurst, and Helena Bilandžija. 2015. Pigment regression and albinism in *Astyanax* cavefish. Chapter 8, pp. 155-173. In: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), *Biology and Evolution of the Mexican Cavefish.* Academic Press (Elsevier), Amsterdam. 404 pp.
- Jeffery, William R., Pooja Doshi, Masato Yoshizawa, and Kelly E. O'Quin. 2013. Development and genetics of the *Astyanax* sclera: An optic tiissue organized by the lens. *AIM 2013 abstracts*:26.
- Jeffery, William R., Strickler A., Guiney S., Heyser D., Tomarev S. 2000. Prox 1 in eye degeneration and sensory organ compensation during development and evolution of the cavefish *Astyanax*. *Dev Genes Evol.* 2000 May, 210(5):223-30.
- Jeffery, William R., Strickler AG., Yamamoto Y. 2003. To see or not to see: evolution of eye degeneration in Mexican blind cavefish. *Integr Comp Biol.* 2003 Aug;43(4):531-41. doi: 10.1093/icb/43.4.531.
- Johnson, Kenneth.W. 1967. Temperature responses of the Mexican blind cave-fishes of the genus *Anoptichthys*. M.S. Thesis. Lubbock: Texas Technological College [Texas Tech University]. 53 pp. <https://ttu-ir.tdl.org/ttu-ir/handle/2346/12680>
- Jordan, C. Basil. 1937. Bringing in the new cave fish *Anoptichthys jordani* Hubbs and Innes. *Aquarium*, Philadelphia, 5(10):203-204.

- Jordan, C.B. 1946. *Anoptichthys x Astyanax* hybrids. Aquarium, Philadelphia, 15:198.
- Kähling, Joachim. 1957. Progressive und regressive Augenentwicklung bei dem Höhlenfisch *Anoptichthys jordani* Hubbs und Innes und das Problem der Rezeptionsorte von Lichtreizen. Diss. Köln.
- Kähling, Joachim. 1961. Untersuchungen über den Lichtsinn und dessen Lokalisation bei dem Höhlenfisch *Anoptichthys jordani* Hubbs & Innes (Characidae). Biologischen Zentralblatt, 80(4):439-451.
- Kaplan, Shane A., Amanda K. Powers, and Joshua B. Gross. 2017. Utilizing live-fluorescent staining to visualize bone growth throughout development in *Astyanax mexicanus*. AIM 2017 posters:48.
- Kasumyan, A. O. and Marusov, E. A. 2015. Chemoorientation in the feeding behavior of the blind Mexican cavefish *Astyanax fasciatus* (Characidae, Teleostei). Russian Journal of Ecology, 46: 559-563.
- Kavalco KF., De Almeida-Toledo LF. 2007. Molecular cytogenetics of blind Mexican tetra and comments on the karyotypic characteristics of genus *Astyanax* (Teleostei, Characidae). Zebrafish. 2007 Summer;4(2):103-111.
- Kavalko, KF and Almeida Toledo, LF. 2007. Molecular cytogenetics of blind Mexican tetra and comments on the karyotypic characteristics of genus *Astyanax* (Teleostei, Characidae). Zebrafish, 4:103-111.
- Keene, Alex C. 2013. Metabolic regulation of sleep in *A. mexicanus*. AIM 2013 abstracts:38.
- Keene, Alex C. 2015. Convergent evolution of sleep loss. AIM 2015 abstracts:24.
- Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.). 2015. Biology and Evolution of the Mexican Cavefish. Biology and Evolution of the Mexican Cavefish. Academic Press (Elsevier), Amsterdam. 404 pp.
- Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh. 2015. Preface. Preface, pp.xiii-xiv In: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), Biology and Evolution of the Mexican Cavefish. Academic Press (Elsevier), Amsterdam. 404 pp.
- Kirby, R. F., Thompson, K. W. and Hubbs, C. 1977. Karyotypic similarities between the Mexican and blind tetras. Copeia, 1977: 578-580.
- Klimpel, Bernd, and Jakob Parzefall. 1990. Comparative study of predatory behaviour in cave and river populations of *Astyanax fasciatus* (Characidae, Pisces). Mémoires de Biospéologie, 17:27-30.
- Koopman, Karl F., and Paul S. Martin. 1959. Subfossil mammals from the Gómez Farías region and the tropical gradient of eastern Mexico. Journal of Mammalogy, 40(1):1-12.
- Kopp, Joseph, Johnmarco Coppola, and Luis Espinasa. 2017. Phylogeographical convergence between two troglobitic organisms in the Sierra de El Abra. AIM 2017:37.
- Kosswig, Curt. 1965. Génétique et évolution régressive. Revue des Questions Scientifiques, 136(2):227-257.
- Kosswig, Curt. 1967. Über das Tempo evolutorischer Prozesse. Zool Beitr N F 1967, 13:441-450.
- Kowalko J.E., Gross, JB., Protas, M., Borowsky, RL and Tabin, C. 2009. Genetic approaches to studying morphological and behavioral traits in *Astyanax mexicanus*. Proceedings of the first International *Astyanax* meeting, Ciudad Valles, Mexico:27.
- Kowalko J.E., Rohner N., Rompani SB., Peterson BK., Linden TA., Yoshizawa M., Kay EH., Weber J., Hoekstra HE., Jeffery W.R., Borowsky R., Tabin CJ. 2013. Loss of schooling behavior in cavefish through sight-dependent and sight-independent mechanisms. Curr Biol. 2013 Oct 7;23(19):1874-83. doi: 10.1016/j.cub.2013.07.056. Epub 2013 Sep 12.
- Kowalko J.E., Rohner, N and Linden, T. A. 2013. Convergence in feeding posture occurs through different loci in independently evolved cave populations of *Astyanax mexicanus*. Times Cited: 0 Proceedings of the National Academy of Sciences, 110: 6933-6938
- Kowalko J.E., Rohner, N., Rompani, S. B., Peterson, B. K., Linden, T. A., Yoshizawa, M., Kay, E. H., Weber, J., Hoekstra, H. E., Jeffery, W. R., Borowsky, R. and Tobin, C. J. 2013. Loss of schooling behavior in cavefish through sight-dependent and sight-independent mechanisms. Current Biology, 23:1874-1883.
- Kowalko J.E., Rohner N., Linden TA., Rompani SB., Warren WC., Borowsky R., Tabin CJ., Jeffery W.R., Yoshizawa M. 2013. Convergence in feeding posture occurs through different genetic loci in independently evolved cave populations of *Astyanax mexicanus*. Proc Natl Acad Sci U S A. 2013 Oct 15;110(42):16933-8. doi: 10.1073/pnas.1317192110. Epub 2013 Oct 1.
- Krejca, Jean. 2002. Recent field investigations of blind *Astyanax*. AMCS Activities Newsletter, 25:95-100.
- Krishnan, Jaya, Christopher Seidel, Nicolas Rohner 2017. Regulatory evolution in cavefish metabolism. AIM 2017 posters:49.
- Krishnan J. and Nicolas Rohner. 2017. [Cavefish and the basis for eye loss](#). Philos Trans R Soc Lond B Biol Sci. 2017 Feb 5;372(1713). pii: 20150487. Review.
- Kruckenhauser L., Haring E., Seemann R., Sattmann H. 2011. Genetic differentiation between cave and surface-dwelling populations of *Garra barreimiae* (Cyprinidae) in Oman. BMC Evol Biol. 2011 Jun 20;11:172. doi: 10.1186/1471-2148-11-172.
- Krutzler, Amanda J., Lauren E. Bruns and Joshua B. Gross. 2013. Fragmentation, fusion and asymmetry in the craniofacial

- skeleton of *Astyanax mexicanus*. AIM 2013 abstracts:31
- Kuhn, Otto, and J. Kähling. 1954. Augenrückbildung und Lichtsinn bei *Anoptichthys jordani* Hubbs und Innes. *Experientia*, 10(9):385-392.
- Kulpa M, Bak-Coleman J, Coombs S. 2015. The lateral line is necessary for blind cavefish rheotaxis in non-uniform flow. *J Exp Biol*. 2015 May 15;218(Pt 10):1603-12. doi: 10.1242/jeb.119537. Epub 2015 Mar 31.
- Kutz, M. I., Lasek, R. I. and Kaiserman-Abramof, I. R. 2017. Ontophylogenetics of the nervous system: Eyeless mutants illustrate how ontogenetic buffer mechanisms channel evolution. *Proceedings of the National Academy of Science*, 78: 397-401.
- Langecker, T. G. Langecker, Thomas G. 1990. Das Licht als Evolutionsfaktor bei Höhlentieren - untersucht an ober- und unterirdisch lebenden Populationen des *Astyanax fasciatus* (Characidae, Pisces). Dissertation am Fachbereich der Biologie Hamburg. 101 pp.
- Langecker, Thomas G. 1989. Studies on the light reaction of epigeal and cave populations of *Astyanax fasciatus* (Characidae, Pisces). *Mémoires de Biospéologie*, 16:169-176.
- Langecker, Thomas G. 1992. Persistence of ultrastructurally well-developed photoreceptor cells in the pineal organ of a phylogenetically old cave-dwelling population of *Astyanax fasciatus* Cuvier, 1819 (Teleostei, Characidae). *Zeitschrift für Zoologische Systematik und Evolutionforschung*, 30(4):287-296.
- Langecker, Thomas G. 1993. Genetic analysis of the dorsal light reaction in epigeal and cave-dwelling *Astyanax fasciatus* (Teleostei Characidae). *Ethology, Ecology & Evolution*, 5(3):357-364.
- Langecker, Thomas G., Neumann B., Hausberg C., Parzefall J. 1995. Evolution of the optical releasers for aggressive behavior in cave-dwelling *Astyanax fasciatus* (Teleostei, Characidae). *Behav Processes*. 1995 Jul;34(2):161-7.
- Langecker, Thomas G., B. Neumann, C. Hausberg, and J. Parzefall. 1995. Evolution of the optical releasers for aggressive behavior in cave-dwelling *Astyanax fasciatus* (Teleostei, Characidae). *Behavioural Processes*, 34(2):161-167.
- Langecker, Thomas G., H. Schmale, and Horst Wilkens. 1993. Studies on the morphology and molecular Langecker, Thomas G., Hartwig Schmale, and Horst Wilkens. 1991. Existence of crystallin and opsin genes in reduced eyes of the cave fish *Astyanax fasciatus* Cuvier 1819. (Abstract). *North American Biospeleology Newsletter*, no. 40:17-18.
- Langecker, Thomas G., Hartwig Schmale, and Horst Wilkens. 1991. Existence of crystallin and opsin genes in reduced eyes of the cave fish *Astyanax fasciatus* Cuvier 1819. (Abstract). *The NSS Bulletin*, 53(2):109-110.
- Langecker, Thomas G., Hartwig Schmale, and Horst Wilkens. 1992. Expression of opsin gene transcripts in degenerated eyes of cave-dwelling *Astyanax fasciatus* (Teleostei, Characidae) and of its conspecific epigeal ancestor at early ontogenetic stages. (Abstract). P. 42 in: Program & Abstracts, International Symposium of Biospeleology, Société de Biospéologie, Tenerife – Canary Islands 7-12 September 1992.
- Langecker, Thomas G., Hartwig Schmale, and Horst Wilkens. 1993. Expression of opsin and crystallin genes in degenerate eyes of cave-dwelling *Astyanax fasciatus* (Teleostei, Characidae) and of its conspecific epigeal ancestor during early ontogeny. (Abstract). Pp. 192 in: Program and Abstracts, Combined Meetings of: American Society of Ichthyologists and Herpetologists, The Herpetologists' League, 17th Annual Larval Fish Conference, American Elasmobranch Society. The University of Texas at Austin, 27 May - 2 June 1993.
- Langecker, Thomas G., Hartwig Schmale, and Horst Wilkens. 1994. Transcription of the opsin gene in degenerate eyes of cave-dwelling *Astyanax fasciatus* (Teleostei, Characidae) and of its conspecific epigeal ancestor during early ontogeny. *Cell & Tissue Research*, 273(1):183-192.
- Langecker, Thomas G., Hartwig Schmale, and Horst Wilkens. 1994. Transcription of the opsin gene in degenerate eyes of cave-dwelling *Astyanax fasciatus* (Teleostei, Characidae) and of its conspecific epigeal ancestor during early ontogeny. (Abstract). *North American Biospeleology Newsletter*, no. 44:5-6.
- Langecker, Thomas G., Horst Wilkens, and H. Schmale. 1995. Developmental constraints in regressive evolution. Studies of the expression of the gamma-s-crystallin gene in the developing lens of cave-dwelling *Astyanax fasciatus* (Cuvier, 1819) (Teleostei, Characidae) by in situ hybridization. *Journal of Zoological Systematics & Evolutionary Research*, 33(3):123-128.
- Langecker, Thomas G., Horst Wilkens, and P. Junge. 1991. Introgressive hybridization in the Pachón Cave population of *Astyanax fasciatus* (Teleostei Characidae). *Ichthyol. Explor. Freshw*, 2:209-212.
- Le Page, M. 2017. Blind cave fish lost eyes by unexpected evolutionary process. *New Scientist*, 21 Oct. 2017.
- Legendre, Laurent, Yannick Elipot, Hélène Hinaux, Stéphane Pere, Frédéric Sohm, and Sylvie Retaux. 2013. Transgenesis methods in *Astyanax*. AIM 2013 abstracts:32.
- Loving, Susie. 1966. Ciudad Valles area. *AMCS Newsletter*, 2(2):34-36.
- Lozano-Vilano, María de Lourdes, and Salvador Contreras-Balderas. 1990. *Astyanax armandoi*, n. sp. from Chiapas, México (Pisces, Ostariophysi: Characidae) with a comparison to the nominal species *A. aeneus* and *A. mexicanus*. *Universidad y Ciencia*, 7(14):95-107.

- Lüling, Karl Heinz. 1953. Über das Sehen jugendlicher *Anoptichthys jordani* (Hubbs und Innes). Die Aqu. u. Terr. Z., 6:62-65.
- Lüling, Karl Heinz. 1953. Die Heimat und die Entdeckung unseres Blindfisches *Anoptichthys jordani*. Die Aqu. u. Terr. Z., 6:314-318.
- Lüling, Karl Heinz. 1954. Untersuchungen am Blindfisch *Anoptichthys jordani* Hubbs und Innes (Characidae). Einige Beobachtungen über das Verhalten des Blindfisches *Anoptichthys jordani* beim Laichen. Naturwissenschaftliche Rundschau, 7(1-12):197-203.
- Lüling, Karl Heinz. 1954. Untersuchungen am Blindfisch *Anoptichthys jordani*, Hubbs und Innes (Characidae). II. Beobachtungen und Experimente an *Anoptichthys jordani* zur Prüfung der Einsteellung zum Futter, zum Licht und zur Wasserturbulenz. Zool. Jb. (Abt. 3, Allg. Zool. u. Physiol.), 65:9-42.
- Lüling, Karl Heinz. 1955. Zur Augenreduktion des aus mexikanischen Höhlen stammenden blinden Salmers *Anoptichthys jordani* (Hubbs und Innes). Photogr. u. Forsch, 6:138-143.
- Lüling, Karl Heinz. 1955. On the subject of eye reduction found in the blind fish *Anoptichthys jordani* (Hubbs and Innes) from the Mexican caves. Photogr. u. Forsch, 6(5):138-143.
- Lüling, Karl Heinz. 1955. Untersuchungen am Blindfisch *Anoptichthys jordani* Hubbs und Innes (Characidae). III. Vergleichend anatomisch--histologische Studien an den Augen des *Anoptichthys jordani*. Zool. Jahrb. (Abt. Anatomie u. Ontogenie), 74:401-477.
- Lüling, Karl Heinz. 1957. *Caecobarbus geertsii* Boulenger - seine Entdeckung, Verbreitung und Lebensweise – und nochmals *Anoptichthys jordani* Hubbs und Innes. Aquarien und Terrarien Zeitschrift, Stuttgart, 10:145- 150.
- Lüling, Karl Heinz. 1962. Untersuchungen am Blindfisch *Anoptichthys jordani* Hubbs und Innes (Characidae). IV. Bemerkungen zur Ökologie und Tiergeographie. Bonner Zoologische Beiträge, 13(1-3):139-145.
- Lüling, Karl. Heinz. 1953. Über die fortschreitende Augendegeneration des *Anoptichthys jordani*; Hubbs und Innes (Characidae). Zoologischer Anzeiger, 151:289-299.
- Lyon, A., Powers, A. K., Gross, J. B. and O'Quin, K. E. 2017. tle: Two – three loci control scleral ossicle formation via epistasis in the cavefish *Astyanax mexicanus*. PLoS One. 2017 Feb 9;12(2):e0171061. doi: 10.1371/journal.pone.0171061. eCollection 2017.
- Ma, Li. 2016. The eye development of *Astyanax* cavefish. Cave Research, 2:1-13.
- Ma, Li, and William R. Jeffery 2017. Paralogueous cystathionine beta synthase genes in *Astyanax mexicanus*: Functional diversification and evolution of cavefish eye degeneration. AIM 2017 posters:50.
- Ma, Li, and William R. Jeffery. 2013. Role of  $\alpha$ A-crystallin in *Astyanax* Cavefish Eye Degeneration. AIM 2013 abstracts:24.
- Ma, Li, and William R. Jeffery. 2015. Molecular Analysis of an *A. mexicanus* Eye QTL Reveals a Potential Role of Cystathionine  $\beta$ -synthase A in Cavefish Eye Degeneration. AIM 2015 abstracts:15.
- Ma, Li, B. Carlson, B. Stahl, M. Powers, and J. B. Gross. 2015. Candidate genes analysis for pigment development in *Astyanax* cavefish. AIM 2015 posters:26.
- Ma, Li, Jeffery W.R., Essner J.J., Kowalko J.E. 2015. Genome editing using TALENs in blind Mexican Cavefish, *Astyanax mexicanus*. PLoS One. 2015 Mar 16;10(3):e0119370. doi: 10.1371/journal.pone.0119370. eCollection 2015.
- Ma, Li, Parkhurst A., Jeffery, W.R. 2014. The role of a lens survival pathway including *sox2* and  $\alpha$ A-crystallin in the evolution of cavefish eye degeneration. Evodevo. 2014 Aug 28;5:28. doi: 10.1186/2041-9139-5-28. eCollection 2014.
- Magniez, G. 1972. Deux Stenasellidae cavernicoles nouveaux de l'Amérique centrale: *Mexistenasellus parzefalli* n. sp. et *Mexistenasellus wilkensi* n. sp. (Crustacea Isopod a Asellota). International Journal of Speleology, 4:19-31.
- Mahlmann S., Meyerhof W., Hausmann H., Heierhorst J., Schönrock C., Zwiers H., Lederis K., Richter D. 1994. Structure, function, and phylogeny of [Arg<sup>8</sup>]vasotocin receptors from teleost fish and toad. Proc Natl Acad Sci U S A. 1994 Feb 15;91(4):1342-5.
- Maldonado, Ernesto, Oscar M. García, and Ana Santacruz. 2017. Evodevo and adaptations to perpetually dark environments: The left-right swimming preference in cave and surface morphs from *Astyanax mexicanus*. AIM 2017:18
- Maria Pons J., Vicens E., Pichardo Y., Aguilar J., Oviedo A., Alencaster G., Garcia-Barrera P. 2010. A new early Campanian rudist fauna from San Luis Potosí in Mexico and its taxonomic and stratigraphic significance. J Paleontol 2010, 84:974–995.
- Mattheij, J.A.M., and P.G.W.J. van Oordt. 1967. The cell types in the adenohipophysys of the blind Mexican cave fish *Anoptichthys jordani*. (Abstr.) Gen. Comp. Endocrinol, Abstr, 9:472.
- Mattheij, J.A.M., J.A.P. Sprangers, and P.G.W.J. van Oordt. 1969. The site of prolactin synthesis in the pituitary gland of *Anoptichthys jordani* and the influence of this hormone on mucous cells. (Abstr.) Gen. Comp. Endocrinol, 13:519-520.
- Mattheij, Johannes Adrianus Maria, and J. A. P. Sprangers. 1969. The site of prolactin secretion in the adenohipophysys of



- the stenohaline teleost *Anoptichthys jordani*, and the effects of this hormone on mucous cells. *Zeitschrift für Zellforschung*, 99:411-419.
- Mattheij, Johannes Adrianus Maria. 1968. The cell types in the adenohypophysis of the blind Mexican cave fish, *Anoptichthys jordani* (Hubbs and Innes). *Zeitschrift für Zellforschung*, 90:542-553.
- Mattheij, Johannes Adrianus Maria. 1968. The ACTH cells in the adenohypophysis of the Mexican cave fish *Anoptichthys jordani*, as identified by metopirone (SU 4885) treatment. *Zeitschrift für Zellforschung*, 92:588- 595.
- Mattheij, Johannes Adrianus Maria. 1969. The thyrotropin secreting basophils in the adenohypophysis of *Anoptichthys jordani*. *Zeitschrift für Zellforschung*, 101:588-597.
- Mattheij, Johannes Adrianus Maria. 1970. The function of the basophilic cells in the meso- adenohypophysis of the blind Mexican cave fish, *Anoptichthys jordani*. (Abstract). *Journal of Endocrinology*, 48:lxix.
- Mattheij, Johannes Adrianus Maria. 1970. The gonadotropic cells in the adenohypophysis of the blind Mexican cave fish, *Anoptichthys jordani*. *Zeitschrift für Zellforschung*, 105:91- 106.
- Maya, Joel Paulo. 1992. Analisis morfométrico del género *Astyanax* (Pisces: Characidae) en México. (Abstract). III Congreso Nacional de Ictiología, Oaxtepec 92, p. 12.
- McAdoo, David J. 1981. Trip reports: Los Sabinos, Xilitla, Mexico. *The Texas Caver*, 26(1):13-14.
- McCauley DW., Hixon E., Jeffery, W.R. 2004. Evolution of pigment cell regression in the cavefish *Astyanax*: a late step in melanogenesis. *Evol Dev*. 2004 Jul-Aug;6(4):209-18.
- McGaugh SE., Gross JB., Aken B., Blin M., Borowsky R., Chalopin D., Hinaux H., Jeffery W.R., Keene A., Ma L., Minx P., Murphy D., O'Quin KE., Rétaux S., Rohner N., Searle SM., Stahl BA., Tabin C., Volff JN., Yoshizawa M., Warren WC. 2014. The cavefish genome reveals candidate genes for eye loss. *Nature Communications*, 2014 Oct 20;5:5307. doi: 10.1038/ncomms6307.
- McGaugh SE., Gross JB., Aken B., Blin M., Borowsky R., Chalopin D., Hinaux H., Jeffery W.R., Keene A., Ma Li, Minx P., Murphy D., O'Quin KE., Rétaux S., Rohner N., Searle SM., Stahl BA., Tabin C., Volff JN., Yoshizawa M., and Warren WC. 2015. The cavefish genome reveals candidate genes for eye loss. *Nat Commun*. 2014 Oct 20;5:5307. doi: 10.1038/ncomms6307.
- McGaugh, Suzanne, Jimmy Weagley, Bill Jeffery, Masato Yoshizawa, Kelly O'Quin, Luis Espinasa, Nicholas Rohner, Richard Borowsky, and Wes Warren. 2015. Population genomics of cavefish. *AIM 2015 abstracts*:9.
- McHenry, M., Feitl, K and Cardenas, G. 2009. Do blind *Astyanax* have highly sensitive lateral line receptors? *Proceedings of the first International Astyanax meeting, Ciudad Valles, Mexico*:37.
- McKenzie, David. 1965. Caves of the Sierra de El Abra, Part 3. Tamuin and El Pujal, S.L.P. *AMCS Newsletter*, 1(4):34-41. 2 maps.
- McKenzie, David. 1965. Caves of the Sierra de El Abra, Part 2. Los Sabinos, S.L.P.: Sótano de la Tinaja. *AMCS Newsletter*, 1(3):29-30.
- McKenzie, David. 1965. Caves of the Sierra de El Abra, Part 2. Los Sabinos, S.L.P.: Sotanito de Montecillos. *AMCS Newsletter*, 1(3):32.
- McKenzie, David. 1966. Sótano de la Tinaja (Mexico). *Speleo Digest*, 1964(1):145-148.
- McKenzie, David. 2014. Walls, Tools for Cave Survey Data Management and WallsMap, GIS Viewer and Shapefile Editor. Texas Speleological Survey, <http://www.texasspeleologicalsurvey.org/>
- McNatt, Logan. 1971. Trip reports: Caves along the Inter-American Highway. 31 December - 7 January 1971. *AMCS Newsletter*, 3(3):40.
- Meder, E. 1952. Über den blinden Höhlenfisch *Anoptichthys jordani* Hubbs & Innes. *Aus der Arbeitsgemeinschaft: Naturzüchtung im VDA. Die Aquarien und Terrarien Zeitschrift*, 7:171-174.
- Meng F., Braasch I., Phillips JB., Lin X., Titus T., Zhang C., Postlethwait JH. 2013. Evolution of the eye transcriptome under constant darkness in *Sinocyclocheilus* cavefish. *Mol Biol Evol*. 2013 Jul;30(7):1527-43. doi: 10.1093/molbev/mst079. Epub 2013 Apr 23. Erratum in: *Mol Biol Evol*. 2013 Oct;30(10):2367.
- Menuet A., Alunni A., Joly JS., Jeffery W.R., Rétaux S. 2007. Expanded expression of Sonic Hedgehog in *Astyanax* cavefish: multiple consequences on forebrain development and evolution. *Development*. 2007 Mar;134(5):845-55. Epub 2007 Jan 24.
- Missal, J., Horst Wilkens, T.G. Langecker, and J. Olcese. 1994. Studies on melatonin rhythmicity in a species of cave fish and its surface ancestor *Astyanax fasciatus* (Cuvier, 1819) (Characidae). (Abstract). XI International Symposium of Biospeleology, Firenze, p. 31.
- Mitchell, R. W. and Elliott, W. R. 1977. The habitats of the eyeless characin fishes of the genus *Astyanax*. *Proceedings of the 6th International Congress of Speleology*, 5: 179-184.
- Mitchell, R. W. and Russell, W. H. 1977. The subsurface waters of the Sierra de El Abra of Mexico. *Proceedings of the 6th International Congress of Speleology*, 4: 163-167.

- Mitchell, Robert W. 1968. New species of Sphalloplana (Turbellaria; Paludicola) from the caves of Texas and a reexamination of the genus Speophila and the family Kenkiidae. *Annales de Spéléologie*, 23(3):597-620.
- Mitchell, Robert W. 1968. Typhlochactas, a new genus of eyeless cave scorpion from Mexico (Scorpionida, Chactidae). *Annales de Spéléologie*, 23(4):753-777, unnumbered pl.
- Mitchell, Robert W. 1969. A comparison of temperate and tropical cave communities. *The Southwestern Naturalist*, 14(1):73-88.
- Mitchell, Robert W. 1970. Population size and dispersion and species associations of a Mexican cavernicole ricinuleid (Arachnida). *Ciencia, México*, 27(2-3):63-74.
- Mitchell, Robert W. 1971. *Typhlochactas elliotti*, a new eyeless cave scorpion from Mexico (Scorpionida, Chactidae). *Annales de Spéléologie*, 26(1):135-148.
- Mitchell, Robert W. 1973. Introgression between the Mexican eyeless characin fishes and their epigeal ancestor, *Astyanax mexicanus*. Pp. 171-173 in: Vladimir Panos, ed, *International Speleology 1973. Proceedings. 6th International Congress of Speleology*, Olomouc, Czechoslovakia, 1973.
- Mitchell, Robert W. 1973. Introgression between the Mexican eyeless characin fishes and their epigeal ancestor. (Abstract). P. 146 in: Vladimir Panos, ed, *International Speleology 1973. Abstracts of papers. 6th International Congress of Speleology*, Olomouc, Czechoslovakia, 1973.
- Mitchell, Robert W. 1977. Introgression between the Mexican eyeless characin fishes and their epigeal ancestor, *Astyanax mexicanus*. *Proceedings of the 6th International Congress of Speleology, Olomouc –CSSR.*, 5:171-173.
- Mitchell, Robert W., and James R. Reddell. 1965. *Eurycea tridentifera*, a new species of troglobitic salamander from Texas and a reclassification of *Typhlomolge rathbuni*. *The Texas Journal of Science*, 17(1):12-27.
- Mitchell, Robert W., and Jerry W. Cooke. 1973. Preliminary morphometric comparisons of several populations of Mexican eyeless characin fishes. (Abstract). P. 147 in: Vladimir Panos, ed, *International Speleology 1973 Abstracts of Papers*. Olomouc: 6th International Congress of Speleology, Olomouc, Czechoslovakia, 1973.
- Mitchell, Robert W., and Jerry W. Cooke. 1977. Preliminary morphometric comparisons of several populations of Mexican eyeless characin fishes of the genus *Astyanax*. *Proceedings of the 6th International Congress of Speleology, Olomouc –CSSR.*, 5:175-178.
- Mitchell, Robert W., and Masaharu Kawakatsu. 1972. A new family, genus, and species of cave-adapted planarian from Mexico (Turbellaria, Tricladida, Maricola). *Occasional Papers, The Museum, Texas Tech University*, no. 8. 16 pp.
- Mitchell, Robert W., and William H. Russell. 1969. Map, "La Region de Ia Sierra de El Abra." Published and distributed privately.
- Mitchell, Robert W., and William H. Russell. 1973. The subsurface waters of the Sierra de El Abra of Mexico. *Proceedings of the 6th International Congress of Speleology, Olomouc –CSSR.*, 4:163-167.
- Mitchell, Robert W., and William H. Russell. 1973. Physiography and geology of the Huastecan Province of Mexico. *Proceedings of the 6th International Congress of Speleology, Olomouc –CSSR.*, 2:261-268.
- Mitchell, Robert W., and William H. Russell. 1976. Stream capture in the Huastecan Province of Mexico. *Proceedings of the 6th International Congress of Speleology, Olomouc –CSSR.*, 4:169-172.
- Mitchell, Robert W., and William R. Elliott. 1973. The cave habitats of the Mexican eyeless characin fishes. (Abstract). P. 147 in: Vladimir Panos, ed, *International Speleology 1973 Abstracts of Papers*. Olomouc: 6th International Congress of Speleology, Olomouc, Czechoslovakia, 1973.
- Mitchell, Robert W., William H. Russell, and William R. Elliott. 1977. Mexican eyeless characin fishes, genus *Astyanax*: Environment, distribution, and evolution. *Special Publications, The Museum, Texas Tech University*, no. 12. 89 pp.
- Mollhagen, Tony. 1971. Checklist of bats in caves in the regions of the Sierra de Guatemala and Sierra de El Abra, northeastern México. *Association for Mexican Cave Studies Bulletin*, 4:19-22.
- Mommersteeg, Mathilda T. M., Madeleine E. Lemieux, Abigail C. Killen, William T. Stockdale, Juanjuan Zhao, Noemie Hamilton, Tetsuhiro Kudoh, Paul R. Riley, Ronny van Aerle, and Yoshiyuki Yamamoto. 2017. Heart regeneration in *Astyanax mexicanus*. *AIM* 2017:27.
- Montgomery, John C., Sheryl Coombs, and Cindy F. Baker. 2001. The mechanosensory lateral line system of the hypogean form of *Astyanax fasciatus*. *Environmental Biology of Fishes*, 62:87-96.
- Montgomery, Neil. 1975. The Sierra de El Abra at Quintero. *AMCS Activities Newsletter* 4:12, 2 maps.
- Moran D., Softley R., Warrant E.J. 2014. Eyeless Mexican cavefish save energy by eliminating the circadian rhythm in metabolism. *PLoS One*. 2014 Sep 24;9(9):e107877. doi: 10.1371/journal.pone.0107877. eCollection 2014.
- Moran D, Softley R, Warrant E.J. 2015. The energetic cost of vision and the evolution of eyeless Mexican cavefish. *Sci Adv*. 2015 Sep 11;1(8):e1500363. doi: 10.1126/sciadv.1500363. eCollection 2015 Sep.
- Moravec, F., and J. Vargas Vazquez. 1996. The development of *Procamballanus* (*Spirocamballanus*) *neocamballeri* (Nematoda: Camallanidae), a parasite of *Astyanax fasciatus* (Pisces) in Mexico. *Folia Parasitologica*, 43(1):61-70.

- Morris, Neal. 1976. The Otates Mine area, Sierra de El Abra, Tamaulipas, Mexico. AMCS Activities Letter, no. 4:17-22, map.
- Morris, Neal. 1989. Sierra de El Abra cave map folio. AMCS., 10 sheets.
- Morris, R. A. 1969. Blind cave fishes. *Animal Kingdom*, 72:26-28.
- Mothes, Patricia, and Roy Jameson. 1984. Sótano de Vásquez. AMCS Activities Newsletter, 14:36-39.
- Muir, JM. 1936. Geology of the Tampico Region, Mexico. Special Volume ed. Tulsa, Oklahoma. American Association of Petroleum Geologists, Tulsa, 280 pp.
- Murray, G. E. 1961. Geology of the Atlantic and Gulf Coastal Province of North America. Harper, New York, 692 pp.
- Myers, G.S. 1966. Derivation of the freshwater fish fauna of Central America. *Copeia*, 1966:766-773.
- Neumann, Burkhard. 1992. Le comportement agressif du poisson épigé *Astyanax fasciatus* (Pisces, Characidae (sic) dans les qualités de lumière différentes. (Abstract). P. 84 in: Program & Abstracts, International Symposium of Biospeleology, Société de Biospéologie, Tenerife – Canary Islands 7-12 September 1992.
- Nigrelli, Ross F. 1947. Spontaneous neoplasms in fishes. III. Lymphosarcoma in *Astyanax* and *Esox*. *Zoologica*, New York, 32(11):101-108, pls. 1-11.
- O'Quin, Kelly, and Suzanne E. McGaugh. 2015. Mapping the genetic basis of troglomorphy in *Astyanax*: How far we have come and where do we go from here? Chapter 6, pp. 111-135. In: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), *Biology and Evolution of the Mexican Cavefish*. Academic Press (Elsevier), Amsterdam. 404 pp.
- Obregón-Barboza, H., S. Contreras-Balderas, and M. de Lourdes Lozano-Vilano. 1994. The fishes of northern and central Veracruz, México. *Hydrobiologia*, 286(2), 79-95.
- Omura Y. 1975. Influence of light and darkness on the ultrastructure of the pineal organ in the blind cave fish, *Astyanax mexicanus*. *Cell Tissue Res.* 1975 Jun 27;160(1):99-112.
- Omura, Yuri. 1975. Influence of light and darkness on the ultrastructure of the pineal organ in the blind cave fish, *Astyanax mexicanus*. *Cell and Tissue Research*, 160:99-112.
- O'Quin KE., Yoshizawa M., Doshi P., Jeffery, W.R. 2013. Quantitative genetic analysis of retinal degeneration in the blind cavefish *Astyanax mexicanus*. *PLoS One*. 2013;8(2):e57281. doi: 10.1371/journal.pone.0057281. Epub 2013 Feb 20.
- O'Quin, Kelly E., Doshi, Pooja, Lyon, Anastasia, Hoenemeyer, Emma, Yoshizawa, Masato and Jeffery, William R. 2015. Complex evolutionary and genetic patterns characterize the loss of scleral ossification in the blind cavefish *Astyanax mexicanus*. *PLoS One*. 2015 Dec 9;10(12):e0142208. doi: 10.1371/journal.pone.0142208. eCollection 2015
- O'Quin, Kelly E., Masato Yoshizawa, Pooja Doshi, and William R. Jeffery. 2013. Quantitative genetic analysis of retinal degeneration in the blind cavefish *A. mexicanus*. *Plos One*, 8: <https://doi.org/10.1371/journal.pone.0057281>
- O'Quin, Kelly E., Masato Yoshizawa, Pooja Doshi, and William R. Jeffery. 2013. Quantitative genetic analysis of retinal degeneration in the blind cavefish *A. mexicanus*. *AIM 2013 abstracts*:27.
- Ornelas-García, Claudia Patricia, and C. Pedraza-Lara 2015. Phylogeny and evolutionary history of *Astyanax mexicanus* Chapter 4, pp. 77-90 In: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), *Biology and Evolution of the Mexican Cavefish*. Academic Press (Elsevier), Amsterdam. 404 pp.
- Ornelas-García, Claudia Patricia, Carlos Pedraza-Lara, David Hernández, y Gerardo Pérez Ponce de León. 2015. The *Astyanax* genus as model group in species delimitation. *AIM 2015 abstracts*:12.
- Ornelas-García, Claudia Patricia, Carlos Pedraza-Lara, Marta Barluenga, and Ignacio Doadrio. 2013. Parallel evolution within the *Astyanax* genus in Mesoamerica. *AIM 2013 abstracts*:36.
- Ornelas-García, Claudia Patricia, Dominguez-Dominguez, O., and Doadrio, I. 2009. Phylogeny and biogeography of the genus *Astyanax* in Mesoamerica. *Proceedings of the first International Astyanax meeting*, Ciudad Valles, Mexico:21.
- Ornelas-García, Claudia Patricia, Dominguez-Dominguez, O., Doadrio I. 2008. Evolutionary history of the fish genus *Astyanax* Baird & Girard (1854) (Actinopterygii, Characidae) in Mesoamerica reveals multiple morphological homoplasies. *BMC Evolutionary Biology* 2008, 8:340.
- Osorio Tafall, Bibiano F. 1943. Observaciones sobre la fauna acuática de las cuevas de la región de Valles, San Luis Potosí (México). *Revista de la Sociedad Mexicana de Historia Natural*, 4(1-2):43-71.
- Osorio Tafall, Bibiano F. 1946. Anotaciones sobre algunos aspectos de la hidrología mexicana. *Revista de la Sociedad Mexicana de Historia Natural*, 7(1-4):139-165.
- Palmer, Arthur N., and Carol A. Hill. 2005. Sulfuric acid caves. Pp. 573-581 in Culver, David C., and William B. White (eds.), *Encyclopedia of Caves*. Elsevier Academic Press, 654 pp.
- Panaram K., Borowsky R., Quattro JM. 1985. Gene flow and genetic variability in cave and surface populations of the Mexican tetra, *Astyanax mexicanus* (Teleostei: Characidae). *Copeia* 1985:409-416.
- Panaram, Kanchana and Richard Borowsky. 2005. Gene flow and genetic variability in cave and surface populations of the Mexican tetra, *Astyanax mexicanus* (Teleostei: Characidae). *Copeia*, 2:409-416.
- Parry JW., Peirson SN., Wilkens H., Bowmaker JK. 2003. Multiple photopigments from the Mexican blind cavefish,

- Astyanax fasciatus*: a microspectrophotometric study. *Vision Res.* 2003 Jan;43(1):31-41.
- Parry, J.L., S.N. Peirson, Horst Wilkens, and J.K. Bowmaker. 2003. Multiple photopigments from the Mexican blind cavefish, *Astyanax fasciatus*: a microspectrophotometric study. *Vision Research*, 43:31-41.
- Parzefall, Jakob. 1983. Field observation in epigeal and cave populations of the Mexican characid *Astyanax mexicanus* (Pisces, Characidae). *Mémoires de Biospéologie*, no. 10:171-176.
- Parzefall, Jakob. 1983. Field observation in epigeal and cave populations of the Mexican characid *Astyanax mexicanus* (Pisces, Characidae). (Abstract). *North American Biospeleology Newsletter*, no. 32:21-22.
- Parzefall, Jakob. 1993. Schooling behaviour in population-hybrids of *Astyanax fasciatus* and *Poecilia mexicana* (Pisces, Characidae and Poeciliidae). Pp. 297-302 in: J. H. Schröder, ed, *New trends in ichthyology*. Parey Verlag.
- Parzefall, Jakob and Diethard Fricke. 1991. Alarm reaction and schooling in population hybrids of *Astyanax fasciatus* (Pisces, Characidae). *Mémoires de Biospéologie*, 18:29-32.
- Parzefall, Jakob and Hausberg, C. 2001. Ontogeny of the aggressive behaviour in epigeal and hypogean populations of *Astyanax fasciatus* (Characidae, teleostei) and their hybrids. *Brazil ISB*:39-40.
- Parzefall, Jakob and Hausberg, C. 2002. Ontogeny of the aggressive behaviour in epigeal and hypogean populations of *Astyanax fasciatus* (Characidae, Teleostei) and their hybrids. *Memoirs de Biospeologie*, 28:157-161.
- Pate, Dale. 1973. Trip report [Sótano de Japonés], November 21-25, 1973. *SWTSG Newsletter 1973 [1975]*, p. 26.
- Patton, P., Coombs, S and Windsor, S. 2009. Active wall following in the Mexican blind cavefish (*Astyanax* sp.) *Proceedings of the first International Astyanax meeting*, Ciudad Valles, Mexico:40.
- Pazza, Rubens, Luiz Antonio Carlos Bertollo, Lurdes Foresti de Almeida-Toledo, Karine Frehner Kavalco. 2013. Molecular systematics of the genus *Astyanax* (Characiformes: Characidae) - starter edition. *AIM 2013 abstracts*: 22.
- Pelz, H.W. 1958. Einiges über den blinden Höhlensalmmler *Anoptichthys jordani* Hubbs und Innes. *Die Aqu. u. Terr.* 5:172-175.
- Peña-Herrejón, G. A., C.P. Ornelas-García, A. Cruz-Hernández, J. Caballero-Pérez, J. F. García-Trejo. 2015. Cavefish *Astyanax mexicanus* as a model to study genetic expression related to shoaling and aggressiveness. *AIM 2015 posters*:32.
- Penney, C. C. and Volkoff, H. 2014. Peripheral injections of cholecystokinin, apelin, ghrelin and orexin in cavefish (*Astyanax fasciatus mexicanus*): Effects on feeding and on the brain expression levels of tyrosine hydroxylase, mechanistic target of rapamycin and appetite-related hormones. *General and Comparative Endocrinology*, 196:34-40.
- Père, Stéphane, Yannick Elipot, Laurent Legendre, Hélène Hinaux, and Sylvie Rétaux. 2013. Statistics on *Astyanax* husbandry in the Gif facility. *AIM 2013 abstracts*:35.
- Peters, N., V. Schacht, W. Schmidt, and Horst Wilkens. 1993. Cerebral proportions and degree of development of sense organs in *Astyanax mexicanus* Pisces Characinidae comparison between river fish and its cave-living forms *Anoptichthys*. German. *Zeitschrift für Zoologische Systematik und Evolutionsforschung*, 31(2):144- 159.
- Peters, Nicolaus, and Gabriele Peters. 1966. Das Auge zweier Höhlenformen von *Astyanax mexicanus* (Philippi) (Characinidae, Pisces). *Roux' Archiv für Entwicklungsmechanik*, 157:393-414.
- Peuß, Robert, Andrew C. Box, and Nicolas Rohner 2017. Approaching “old friends” with a new model: How pathogen diversity shaped the adaptation of *Astyanax mexicanus* to the cave. *AIM 2017*:
- Pfeiffer, Wolfgang. 1966. Über die Vererbung der Schreckreaktion bei *Astyanax* (Characidae, Pisces). *Z. Vererbungs*, 98:97-105.
- Pfeiffer, Wolfgang. 1967. Die Korrelation von Körperlänge, Augen-, Linsen- und Pupillengröße bei Hybriden aus *Astyanax* x *Anoptichthys* (Characidae, Pisces). *Roux' Archiv für Entwicklungsmechanik*, 158:218-245.
- Pfeiffer, Wolfgang. 1967. Die Korrelation von Augengröße und Mittelhirngröße bei Hybriden aus *Astyanax* x *Anoptichthys* (Characidae, Pisces). *Roux' Archiv für Entwicklungsmechanik*, 159:365-378.
- Pierre, Constance, Cynthia Froc, Jacques Callebert, and Sylvie Rétaux. 2017. Functional and behavioral consequences of the mutation in MAO in the blind cavefish *Astyanax mexicanus*. *AIM 2017 posters*:53.
- Piscor, D. and Parise-Maltempi, P. P. 2016. Chromosomal mapping of H3 histone and 5S rRNA genes in eight species of *Astyanax* (Pisces, Characiformes) with different diploid numbers: syntenic conservation of repetitive genes. *Genome*, 59: 167-172.
- Piscor, D., Centofante, L and Parise-Maltempi, P. P. 2016. Highly similar morphologies between chromosomes bearing U2 snRNA gene clusters in the group *Astyanax* Baird and Girard 1854 (Characiformes: Characidae): An evolutionary approach in species with 2n=36, 46, 48 and 50. *Zebrafish*, 13: 565-570.
- Plath, M., Rohde, M., Schroder, T., Taebel-Hellwig, A and Schlupp, I. 2006. Female mating preferences in blind cave tetras *Astyanax fasciatus* (Characidae, Teleostei). *Behaviour*, 143:15-32.
- Popper, Arthur N. 1969. A behavioral and morphological analysis of audition in the Mexican blind cave fish, *Astyanax*

- jordani*, and its eyed ancestor *Astyanax mexicanus*. Ph.D. Dissertation. New York: City University of New York. ix + 149 pp.
- Popper, Arthur N. 1970. Auditory capacities of the Mexican blind cave fish (*Astyanax jordani*) and its eyed Porter, M., Dittmar, K and Perez-Losada, M. 2007. How long does evolution of the troglomorphic form take? Estimating divergence times in *Astyanax mexicanus*. Pp. 173-182 in Andrej Kranjc, Franci Gabrovsek, David C. Culver, and Ira D. Sasowsky (eds.), 2007, Time in Karst. Special Publication 12, Karst Waters Institute, Leesburg, Virginia, 243 p.
- Porter, ML., Jeffery, WR and Dittmar, K. 2009. Estimating divergence times in *Astyanax mexicanus*. Proceedings of the first International *Astyanax* meeting, Ciudad Valles, Mexico:25.
- Pottin, K. and Retaux, S. 2009. Interactions between signalling centres for anterior neural plate patterning in *Astyanax*. Proceedings of the first International *Astyanax* meeting, Ciudad Valles, Mexico:29.
- Pottin, K., Hinaux, H., Elipot, Y., Chaloub, H., Pere, S., and Retaux, S. 2011. A developmental staging table for *Astyanax mexicanus* surface fish and Pachón cavefish. AIM meeting 2011:36.
- Powers, Amanda K., Davis, E. M., Kaplan, S. A. and Gross, J. B 2017. Cranial asymmetry arises later in the life history of the blind Mexican cavefish, *Astyanax mexicanus*. PLoS One. 2017 May 9;12(5):e0177419. doi: 10.1371/journal.pone.0177419. eCollection 2017.
- Powers, Amanda K., Jenny, Y.T. Sung and Joshua B. Gross. 2015. Investigating a potential relationship between constructive trait evolution and aberrant cranial phenotypes in *Astyanax* cavefish. AIM 2015 abstracts:18.
- Protas M., and Jeffery, W.R. 2012. Evolution and development in cave animals: from fish to crustaceans. Wiley Interdiscip Rev Dev Biol. 2012 Nov-Dec;1(6):823-45. doi: 10.1002/wdev.61. Review.
- Protas M., Conrad M., Gross JB., Tabin C., Borowsky R. 2007. Regressive evolution in the Mexican cave tetra, *Astyanax mexicanus*. Current Biology. 2007 Mar 6;17(5):452-4. Epub 2007 Feb 15.
- Protas M., Tabansky I., Conrad M., Gross JB., Vidal O., Tabin CJ., Borowsky R. 2008. Multi-trait evolution in a cave fish, *Astyanax mexicanus*. Evolution and Development. 2008 Mar-Apr;10(2):196-209. doi: 10.1111/j.1525-142X.2008.00227.x.
- Protas ME., Hersey C., Kochanek D., Zhou Y., Wilkens Horst, Jeffery W.R., Zon LI., Borowsky R., Tabin CJ. 2006. Genetic analysis of cavefish reveals molecular convergence in the evolution of albinism. Nature Genetics, 38(2):107–111.
- Protas ME., I. Tabansky, M. Conrad, Joshua B. Gross, O. Vidal, C.J. Tabin, et al. 2008. Multi-trait evolution in a cave fish, *Astyanax mexicanus*. Evolution and Development, 10(2):196-209.
- Protas ME., M. Conrad, Joshua B. Gross, C.J. Tabin, and Richard Borowsky. 2007. Regressive evolution in the Mexican cave tetra, *Astyanax mexicanus*. Current Biology, 17(5):452-454.
- Quantum GIS. 2014. QGIS., A Free and Open Source Geographic Information System. <http://www.qgis.org/en/site/>
- Quinn TP. 1980. Locomotor responses of juvenile blind cave fish, *Astyanax jordani*, to the odors of conspecifics. Behavioral and Neural Biology, 29:123-127.
- Ramsey, Tom. 1975. Report from the El Abra: Scoop! The Cleve-O-Grotto News, 21(1):9-18.
- Ramsey, Tom. 1982. Report from the El Abra: Scoop! Speleo Digest, 1975:208-210.
- Rasquin, P., and E. Hafter. 1951. Age changes in the testis of the teleost, *Astyanax mexicanus*. J. Morphol, 89:397-407.
- Rasquin, Priscilla. 1949. Regeneration of the optic nerve after section with return of vision in the characin *Astyanax mexicanus*. Physiological Zoology, 22:131- 135, pl. 1.
- Rasquin, Priscilla. 1949. The influence of light and darkness on thyroid and pituitary activity of the characin *Astyanax mexicanus* and its cave derivatives. Bulletin of the American Museum of Natural History, 93(7):497-531, pls. 20-25.
- Reddell, James R. 1965. Biology of the caves of the northern El Abra range. The AMCS Newsletter, 1(2):19-21.
- Reddell, James R. 1966. Biology of the caves of the Gómez Farías region, Tamaulipas, Mexico. (Abstract). Bulletin of the National Speleological Society, 28(2):98.
- Reddell, James R. 1967. Cave biology of the Sierra de Guatemala. Association for Mexican Cave Studies Bulletin, 1:55-56.
- Reddell, James R. 1967. Cave biology of the Sierra de El Abra. Association for Mexican Cave Studies Bulletin, 1:82-83.
- Reddell, James R. 1968. Mexican cave biology: Annotated bibliography. The AMCS Newsletter, 2(5):125-128.
- Reddell, James R. 1973. Sierra de Guatemala and Sierra de El Abra, Tamaulipas and San Luis Potosí. AMCS Newsletter, 4(3):77-78.
- Reddell, James R. 1980. Federico Bonet Marco. 1906–1980. Obituary. AMCS Activities Newsletter, no. 11:30- 31.
- Reddell, James R. 1981. A review of the cavernicole fauna of Mexico, Guatemala, and Belize. Texas Memorial Museum Bulletin, 27. 327 pp.
- Reddell, James R. and Robert W. Mitchell, eds. 1971. Studies on the cavernicole fauna of México. Association for Mexican Cave Studies Bulletin, 4. 239 pp.
- Reddell, James R. and Robert W. Mitchell. 1971. A checklist of the cave fauna of México. I. Sierra de El Abra, Tamaulipas

- and San Luis Potosí. Association for Mexican Cave Studies Bulletin, 4:137-180.
- Reddell, James R. and Robert W. Mitchell. 1971. A checklist of the cave fauna of México. II. Sierra de Guatemala, Tamaulipas. Association for Mexican Cave Studies Bulletin, 4:181-215.
- Reddell, James R. and William R. Elliott. 1973. A checklist of the cave fauna of México. IV. Additional records from the Sierra de El Abra, Tamaulipas and San Luis Potosí. Association for Mexican Cave Studies Bulletin, 5:171-180.
- Reddell, James R. and William R. Elliott. 1973. A checklist of the cave fauna of Mexico. V. Additional records from the Sierra de Guatemala, Tamaulipas. Association for Mexican Cave Studies, Bulletin 5:181-190.
- Ren, WY and Yamamoto, Y. 2009. How cavefish lost their eyes. Midline signalling and eye development. Proceedings of the first International *Astyanax* meeting, Ciudad Valles, Mexico:31.
- Rétaux, Sylvie, 2011. Projection of a movie promoting *Astyanax* as a model system AIM meeting 2011:31.
- Rétaux, Sylvie, Alexandre Alié, Maryline Blin, Lucie Devos, Yannick Elipot, and Hélène Hinaux. 2015. Neural development and evolution in *Astyanax mexicanus*: Comparing cavefish and surface fish brains. Chapter 12, pp. 227-244 In: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), *Biology and Evolution of the Mexican Cavefish*. Academic Press (Elsevier), Amsterdam. 404 pp.
- Rétaux, Sylvie, Alunni, A., Menuet, A and Pottin, K. 2009. Why do cavefish first develop eyes? A forebrain development hypothesis. Proceedings of the first International *Astyanax* meeting, Ciudad Valles, Mexico:32.
- Rétaux, Sylvie, and Elipot Y. 2013. Feed or fight: Deleopmental origin of a behavioral shift in blind cavefish. *Commun Integr Biol.* 2013 Mar 1;6(2):e23166. doi: 10.4161/cib.23166. Rétaux, Sylvie, K. Pottin, and A. Alunni. 2008. Shh and forebrain evolution in the blind cavefish *Astyanax mexicanus*. *Biology of the Cell*, 110(3):139-147.
- Rétaux, Sylvie, Pottin K., Alunni A. 2008. Shh and forebrain evolution in the blind cavefish *Astyanax mexicanus*. *Biol Cell.* 2008 Mar;100(3):139-47. doi: 10.1042/BC20070084. Review.
- Rétaux, Sylvie, Pottin, K., and Hyacinthe, C. 2011. The nature and function of the *Astyanax* casquette. AIM meeting 2011:21.
- Rétaux, Sylvie, Yoni Bibliowicz, Maryline Blin, Yannick Elipot, Luis Espinasa1, Hélène Hinaux, Eugène Tine. 2017. Mechanisms underlying the evolution of olfactory capacities in blind cavefish. AIM 2017:14.
- Reynoso, VH., Paredes-Leon, R., and Arroyo Lambaer, D. 2009. Conservation issues in the blind cave fishes of the genus *Astyanax* in northeastern Mexico. Proceedings of the first International *Astyanax* meeting, Ciudad Valles, Mexico:20.
- Riddle, Misty R., and Clifford J. Tabin. 2015. *Astyanax mexicanus* as a model to study metabolism and the evolution of the digestive system. AIM 2015 abstracts:21.
- Riddle, Misty R., Megan Finley, David Marancik, Brian Martineau, and Clifford Tabin. 2017. What's in your water? Pathogen landscape analysis of lab-raised *Astyanax mexicanus*; practical guidelines to increase biosecurity. AIM 2017 posters:54.
- Riedel G., Krug L. 1997. The forebrain of the blind cave fish *Astyanax hubbsi* (Characidae). II. Projections of the olfactory bulb. *Brain Behav Evol.* 1997;49(1):39-52.
- Riedel, G. 1997. The forebrain of the blind cave fish *Astyanax hubbsi* (Characidae). I. General anatomy of the telencephalon. 1997. *Brain, Behavior & Evolution*, 49(1):20-38.
- Riedel, G. 1997. The forebrain of the blind cave fish *Astyanax hubbsi* (Characidae). I. General anatomy of the telencephalon. *Brain Behav Evol.* 1997;49(1):20-38.
- Riedel, G. 1998. Long-term habituation to spatial novelty in blind cave fish (*Astyanax hubbsi*): role of the telencephalon and its subregions. *Learn Mem.* 1998 Mar-Apr;4(6):451-61.
- Riedel, G., and L. Krug. 1997. The forebrain of the blind cave fish *Astyanax hubbsi* (Characidae). II. Projections of the olfactory bulb. *Brain, Behavior & Evolution*, 49(1):39-52.
- Rioja, Enrique. 1952. Estudios carcinológicos. XXVII. Descripción de una nueva especie del género *Cubaris* (Isópodo, Cubárido) de la Cueva de los Sabinos (San Luis Potosí). *Anales del Instituto de Biología, México*, 22(2):517-524.
- Rivas Manzano, Patricia, Leticia Parra Gámez, Rosario Ortíz Hernández, and Luis Espinasa-Pereña. 1998. Comparación de la estructura del ojo de *Astyanax* y sus derivados troglomorfo de la Gruta de las Granadas. (Abstract). Pp. 30-31 in: Programa y Resúmenes, IV Congreso Nacional Mexicano de Espeleología, 4 al 7 de diciembre de 1998, Tehuacán, Puebla.
- Robinson, Beatriz G., James B. Jaggard, Masato Yoshizawa, Alex C. Keene. 2015. The evolution of sleep loss in relation to metabolic processes in Mexican cavefish. AIM 2015 posters:25
- Rodrigues, FR. 2013. Comparison of brain and cranial nerve morphology between eyed surface fish and blind cave fish of the species *Astyanax mexicanus*. Universidade de Lisboa.
- Rohner, Nicolas. 2015. Selection through standing genetic variation. Chapter 7, pp. 137-152. In: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), *Biology and Evolution of the Mexican Cavefish*. Academic Press

- (Elsevier), Amsterdam. 404 pp.
- Rohner, Nicolas, Ariel Aspiras, Richard Borowsky, and Cliff Tabin. 2015. Hungry, Fat, and Healthy – Studying the physiological basis of cave adaptation. AIM 2015 abstracts:17.
- Rohner, Nicolas, Jarosz DF., Kowalko JE., Yoshizawa M., Jeffery W.R., Borowsky RL., Lindquist S., Tabin CJ. 2013. Cryptic variation in morphological evolution: HSP90 as a capacitor for loss of eyes in cavefish. Science. 2013 Dec 13;342(6164):1372-5. doi: 10.1126/science.1240276.
- Rohner, Nicolas, Jarosz DF., Taipale M., Kowalko J., Yoshizawa M., Jeffery W.R., Borowsky RL., Lindquist S., and Tabin CJ. 2013. HSP90 as a capacitor for the evolution of eye loss in cavefish. AIM 2013 abstracts:25.
- Romero, Aldemaro. 1982. Troglomorphic behavior in a population of *Astyanax fasciatus* (Characidae): A route to cave colonization. (Abstract). American Soc. Ichthyologists and Herpetologists 62nd Ann. Meeting, June 13- 19, 1982. Program of the meeting.
- Romero, Aldemaro. 1983. Genetical, morphological and behavioral studies on the evolutionary biology of the *Astyanax* species complex of Middle America. NSS News, 41(1):8.
- Romero, Aldemaro. 1983. Introgressive hybridization in the *Astyanax fasciatus* (Pisces: Characidae) The NSS Bulletin, 45:81-85.
- Romero, Aldemaro. 1984. Introgressive hybridization in the *Astyanax fasciatus* (Pisces: Characidae) population at La Cueva Chica. The NSS Bulletin, 45(4):81- 85.
- Romero, Aldemaro. 1984. Behavior in an 'intermediate' population of the subterranean-dwelling characid *Astyanax fasciatus*. Environmental Biology of Fishes, 10(3):203-207.
- Romero, Aldemaro. 1984. Behavior in an 'intermediate' population of the subterranean-dwelling characid *Astyanax fasciatus*. Environmental Biology of Fishes, 10(3), 203-207.
- Romero, Aldemaro. 1984. Responses to light in cave and surface populations of *Astyanax fasciatus* (Pisces: Characidae): An evolutionary interpretation. Ph.D. Dissertation. Miami, Florida: University of Miami. 147 pp.
- Romero, Aldemaro. 1984. Cave colonization by fish: The role of bat predation. (Abstract). American Association for the Advancement of Science, 150th meeting, 24-29 May, New York. Abstracts of papers, p. 146.
- Romero, Aldemaro. 1985. Ontogenetic change in phototactic responses of surface and cave populations of *Astyanax fasciatus* (Pisces: Characidae). Copeia, 1985(4):1004-1011.
- Romero, Aldemaro. 1985. Morphological variation accompanying cave evolution in *Astyanax fasciatus* (Pisces: Characidae). NSS News, 43(1, pt. 2):22.
- Romero, Aldemaro, Andrea Romero, Meghan N. Lelonek, Katy C. Stropnick, Steven M. Green, William R. Jeffery, and Yoshiyuri Yamamoto. 2001. One eye but no vision: Troglomorphic *Astyanax fasciatus* (Pisces: Characidae) with regenerated eyes do not respond to light. [abstract] Journal of Cave and Karst Studies, 63(3):109.
- Romero, Aldemaro, Green SM., Lelonek MM., Stropnick KC. 2003. One eye but no vision: cave fish with induced eyes do not respond to light. J Exp Zool B Mol Dev Evol. 2003 Dec 15;300(1):72-9.
- Romero, Aldemaro, William R. Jeffery, and Yoshiyuki Yamamoto. 2002. When cave fish see the light: Reaction norm to light exposure during development in epigeal, troglomorphic, and hybrids of *Astyanax fasciatus* (Characidae). [abstract] Journal of Cave and Karst Studies, 64(3):181.
- Rose, Francis L., and Robert W. Mitchell. 1982. Comparative lipid values of epigeal and cave-adapted *Astyanax*. The Southwestern Naturalist, 27(3):357-358.
- Rose, P.R. 1963. Comparison of the type El Abra of Mexico with "Edwards Reef Trend" of south-central Texas. Pp. 57 -64, in Corpus Christi Geol. Soc. Annual field trip, May 23-26, 1963, 107 pp.
- Rowland, Jon Mark. 1971. *Agastochizomus lucifer*, a new genus and species of cavernicole schizomid (Arachnida, Schizomida) from México. Association for Mexican Cave Studies Bulletin, 4:13-17.
- Russell, William H. 1965. Caves of the Sierra de El Abra. Part II. Los Sabinos, S.L.P.: Cueva de los Sabinos. The Association for Mexican Cave Studies, 1(3):31.
- Russell, William H. 1969. Previously unexplored caves near Ciudad Mante, Tamps. AMCS Newsletter, 3(2):24-26.
- Russell, William H. 1970. The discovery and exploration of Sótano de Caballo Moro. UTG News, 4(2?):1-4.
- Russell, William H. 1972. Corrections and additions to the map of "La región de la Sierra de El Abra." AMCS Newsletter, 3(6):126-127.
- Russell, William H. 1972. Trip reports: Caves S of Micos (Municipio de Valles) and caves in the vicinity of Cartabanchal (Municipio de Jaumave). November 1971. AMCS Newsletter, 3(6):120-123.
- Russell, William H. 1972. Geographical checklist of the caves of the Sierra de El Abra. AMCS Newsletter, 3(6):133-142.
- Russell, William H., and David McKenzie. 1965. Caves of the Sierra de El Abra. Part II. Los Sabinos, S.L.P. The AMCS Newsletter, 1(3):28- 33, map.
- Russell, William H., and Robert W. Mitchell. 1969. La Región de la Sierra de El Abra. Map, letter, and legend. Texas Tech

- University, Lubbock: 5 pp.
- Russell, William H., and Terry W. Raines, eds. 1967. Caves of the Inter-American Highway, A guide to caves of northeastern Mexico. Association for Mexican Cave Studies Bulletin, 1. 126 pp.
- Şadoglu, Perihan. 1956. A preliminary report on the genetics of the Mexican cave characins. *Copeia*, 1956(2):13-14.
- Şadoglu, Perihan. 1967. Mendelian inheritance in the hybrids between the Mexican blind cave fishes and their overground ancestor. *Veh. Deutschen Zool. Ges. Graz*, 1957:432-439.
- Şadoglu, Perihan. 1975. Genetic paths leading to blindness in *Astyanax mexicanus*. Pp. 419-426 in: M. A. Ali, ed, Vision in fishes. New approaches to research. New York: Plenum Press.
- Şadoglu, Perihan. 1979. A breeding method for blind *Astyanax mexicanus* based on annual spawning patterns. *Copeia*, 1979(2):369-371.
- Şadoglu, Perihan, and Anne McKee. 1969. A second gene that affects eye and body color in Mexican blind cave fish. *Journal of Heredity*, 60(1):10-14.
- Salin K., Voituron Y., Mourin J., Hervant F. 2010. Cave colonization without fasting capacities: an example with the fish *Astyanax fasciatus mexicanus*. *Comp Biochem Physiol A Mol Integr Physiol*. 2010 Aug;156(4):451-7. doi: 10.1016/j.cbpa.2010.03.030. Epub 2010 Apr 9.
- Salin, K., Voituron, Y., Colson, C and Hervant, F. 2008. Salin, K., Voituron, Y., Mourin, J and Hervant, F. 2011. Cave colonization without fasting capacities: An example with the fish *Astyanax fasciatus mexicanus*. AIM meeting 2011:19.
- Sanchez, Marco Garduño, Ramses Miranda, Andrea Herrera García, and Claudia Patricia Ornelas García 2017. Evolutionary history of visual pigments in *Astyanax* genus. AIM 2017 posters:51.
- Santacruz Vázquez, Ana Ofelia, Rolando Bárcenas-Luna<sup>1</sup>, and Fausto Arellano-Carbajal. 2013. Compared phylogenies of monogeneans parasites and their host *Astyanax mexicanus*. AIM 2013 abstracts:18.
- Santacruz, Ana, Oscar M. Garcia, Maryana Tinoco-Cuellar, Emma Rangel-Huerta, and Ernesto Maldonado. 2015. Spatial mapping in perpetual darkness: EvoDevo of behavior in *Astyanax mexicanus* cavefish. Chapter 18, pp. 361-376 IN: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), *Biology and Evolution of the Mexican Cavefish*. Academic Press (Elsevier), Amsterdam. 404 pp.
- Sarma, SSS., Lopez-Romulo, A and Nandini, S. 2003. Larval feeding behaviour of blind fish *Astyanax fasciatus* (Characidae), black tetra *Gymnocorymbus ternetzi* (Characidae) and angel fish *Pterophyllum scalare* (Cichlidae) fed zooplankton. *Hydrobiologia*, 510:207-216.
- Schemmel, Christian. 1967. Vergleichende Untersuchungen an den Hautsinnesorganen ober- und unterirdisch lebender *Astyanax*-Formen. Ein Beitrag zur Evolution der Cavernicolen. *Z. Morph. Tiere*, 61:255-316.
- Schemmel, Christian. 1973. Les organes sensoriels cutanés du genre *Astyanax* (Pisces, Characidae) chez les formes occupant des biotopes souterrains. *Annales de Spéléologie*, 28(2):209-219.
- Schemmel, Christian. 1974. Studies on the genetics of feeding behavior in the cave fish *Astyanax mexicanus* f. *Anoptichthys*. *Z. Tierpsychol*, 53:9-22.
- Schemmel, Christian. 1974. Genetische Untersuchungen zur Evolution des Geschmacksapparates bei cavernicolen Fischen. *Z. Zool. Syst. Evolutionsforschung*, 12(3):196-215.
- Schemmel, Christian. 1980. Studies on the genetics and feeding behaviour in the cave fish *Astyanax mexicanus* f. *Anoptichthys*. An example of apparent monofactorial inheritance by polygenes. *Z. Tierpsychol*, 53:9-22.
- Schemmel, Christian. 1980. Studies on the genetics of feeding behaviour in the cave fish *Astyanax mexicanus* f. *Anoptichthys*. An example of apparent monofactorial inheritance by polygenes. *Z. Tierpsychol*. 1980;53(1):9- 22.
- Schmitter-Soto, Juan J. 2016. A phylogeny of *Astyanax* (Characiformes: Characidae) in Central and North America. *Zootaxa*, 4109:101-130. <http://doi.org/10.11646/zootaxa.4109.2.1>
- Schmitter-Soto, Juan J. 2017. A revision of *Astyanax* (Characiformes: Characidae) in Central and North America, with the description of nine new species. *Journal of Natural History*, 51:1331-1424.
- Senkel, S. 1982. Zum Schwarmverhalten von Bastarden zwischen Fluss- und Höhlenpopulationen bei *Astyanax mexicanus* (Pisces, Characidae). Diploma thesis. University of Hamburg. 69 pp.
- Senkel, S. 1983. Zum Schwarmverhalten von Bastarden zwischen Flub- und Höhlenpopulationen bei *Astyanax mexicanus* (Pisces, Characidae). Univeröff. Staatsexamensarbeit Univ. Hamburg.
- Sepulveda, D and Espinosa, H. 2009. Morphologic variation of *Astyanax mexicanus* in the Atlantic slope of Mexico. Proceedings of the first International *Astyanax* meeting, Ciudad Valles, Mexico:22.
- Sharma, S., Coombs, S., Patton, P., and Burt de Perera, T. 2009. The function of wall-following behaviours in the Mexican blind cavefish and a sighted relative, the Mexican tetra (*Astyanax*). *Journal of Comparative Physiology A.*, 195:225-240.



- Simon, Noah, Suguru Fujita, Megan Porter, and Masato Yoshizawa 2017. Extra-ocular opsin expression of *Astyanax mexicanus* cave and surface morphs. AIM 2017 posters:55.
- Sligar CM., Voneida TJ. 1976. Tectal efferents in the blind cave fish *Astyanax hubbsi*. J Comp Neurol. 1976 Jan 1;165(1):107-24.
- Sligar, C. 1974. An investigation of tectal efferents in the blind cave fish, *A. hubbsi*. Anatomical Record, 178: 467.
- Sligar, Catherine M., and Theodore J. Voneida. 1976. Tectal efferents in the blind cave fish *Astyanax hubbsi*. The Journal of Comparative Neurology, 165(1):107-124.
- Soares, Daphne. 2015. Functional imaging of circuits commonly associated with vision processing in the *Astyanax* blind cave fish. AIM 2015 abstracts:20.
- Soares, Daphne and Niemiller, Matthew L. 2013. Sensory adaptations of fishes to subterranean environments. Bioscience, 63: 274-283.
- Soares, Daphne, Yamamoto Y., Strickler AG., Jeffery, W.R. 2004. The lens has a specific influence on optic nerve and tectum development in the blind cavefish *Astyanax*. Dev Neurosci. 2004;26(5-6):308-17.
- Sosa Jiménez, Victor Manuel, and Claudia Patricia Ornelas-García. 2017. Little creatures reveal great stories: Gut microbiome of the cavefish *Astyanax mexicanus* (De Filippi, 1853). AIM 2017 posters:56.
- Stahl, Aaron L., Bethany A. Stahl, Elke Buschbeck, and Joshua B. Gross. 2013. An evaluation of eyelessness in cave-dwelling *Astyanax mexicanus* using RNA-seq Technology. AIM 2013 abstracts:30.
- Stahl, Bethany A. and Gross, Joshua B. 2015. Alterations in Mc1r gene expression are associated with regressive pigmentation in *Astyanax* cavefish. Development Genes and Evolution, 225: 367-375.
- Stahl, Bethany A., and Joshua B. Gross. 2013. Pigmentation loss in cave animals: A high-resolution study of destructive genetic mutations. AIM 2013 abstracts:28.
- Stahl, Bethany A., Gross Joshua B. 2017. A comparative transcriptomic analysis of development in two *Astyanax* cavefish populations. J Exp Zool B Mol Dev Evol. 2017 Sep;328(6):515-532. doi: 10.1002/jez.b.22749. Epub 2017 Jun 14.
- Stahl, Bethany A., Li Ma, and Joshua B. Gross. 2015. High-resolution genomic mapping reveals genes contributing to complex melanophore variation in *Astyanax mexicanus* cavefish. AIM 2015 abstracts:11.
- Stahl, Bethany A.. and Gross, Joshua B. 2013. Pigmentation loss in cave animals: A high-resolution study of destructive genetic mutations. AIM 2013 abstracts:28.
- Stehli FG., Webb SD. 1985. The Great American biotic interchange. New York. Plenum Press.
- Stemmer M., Schuhmacher LN., Foulkes NS., Bertolucci C., Wittbrodt J. 2015. Cavefish eye loss in response to an early block in retinal differentiation progression. Development. 2015 Feb 15;142(4):743-52. doi: 10.1242/dev.114629. Epub 2015 Jan 23.
- Stemmer, Manuel, Laura-Nadine Schuhmacher, Nicholas S. Foulkes, Cristiano Bertolucci, and Joachim Wittbrodt. 2013. Unravelling continuous eye growth in teleosts by studying blind cavefish. AIM 2013 abstracts:33.
- Stock, DW. 2009. *Astyanax mexicanus* and the developmental genetic mechanisms of dental evolution. Proceedings of the first International *Astyanax* meeting, Ciudad Valles, Mexico:30.
- Stolk, A. 1958. Tumours of fishes. XXIV. Ocular melanoma in the characid *Anoptichthys jordani* Hubbs et Innes. Proceedings, Koninklijke Nederlandse Akademie van Wetenschappen, series C., Biological and Medical Sciences, 61(3):382-394.
- Strecker U., Faúndez VH., Wilkens H. 2004. Phylogeography of surface and cave *Astyanax* (Teleostei) from Central and North America based on cytochrome b sequence data. Mol Phylogenet Evol. 2004 Nov;33(2):469- 81.
- Strecker U., Faundez VH., Wilkens Horst. 2004. Phylogeography of surface and cave *Astyanax* (Teleostei) from Central and North America based on cytochrome b sequence data. Mol Phylogenet Evol 2004, 33:469–481.
- Strecker U. 2003. Polymorphic microsatellites isolated from the cave fish *Astyanax fasciatus*. Molecular Ecology Notes.
- Strecker, U and Wilkens, H. 2002. Genetic divergence between cave and surface populations of *Astyanax* in Mexico. Proceedings of the 16th International Symposium of Biospeleology, Verona, September 2002: 65.
- Strecker, U., Bernatchez, L and Wilkens, H. 2003. Genetic divergence between cave and surface populations of *Astyanax* in Mexico (Characidae, Teleostei). Molecular Ecology, 12:699-710.
- Strecker, U. 2008. Introgression in *Astyanax fasciatus* cave populations. 19th International Congress of Biospeleology:91.
- Strecker, U., Hausdorf, B., and Horst Wilkens. 2012. Parallel speciation in *Astyanax* cave fish (Teleostei) in Northern Mexico. Molecular Phylogenetics and Evolution, 2012, 62:62–70.
- Strecker, U., L. Bernatchez, and Horst Wilkens. 2003. Genetic divergence between cave and surface populations of *Astyanax* in Mexico (Characidae, Teleostei). Molecular Ecology, 12:699-710.
- Streets, A and Soares, D. 2009. Changes in sensory strategies during development of cavefish. Proceedings of the first International *Astyanax* meeting, Ciudad Valles, Mexico:34.

- Strickler, AG., and Soares, D. 2011. Comparative genetics of the central nervous system in epidean and hypogean *Astyanax mexicanus*. *Genetica*, 139:383-391.
- Strickler, AG., Byerly MS., Jeffery, W.R. 2007. Lens gene expression analysis reveals downregulation of the anti-apoptotic chaperone alphaA-crystallin during cavefish eye degeneration. *Dev Genes Evol.* 2007 Dec;217(11-12):771-82. Epub 2007 Nov 17.
- Strickler, AG., Famudítimi K., Jeffery, W.R. 2002. Retinal homeobox genes and the role of cell proliferation in cavefish eye degeneration. *Int J Dev Biol.* 2002 May;46(3):285-94.
- Strickler, AG., Jeffery, W.R. 2009. Differentially expressed genes identified by cross-species microarray in the blind cavefish *Astyanax*. *Integrative Zoology.* 2009 Mar;4(1):99-109. doi: 10.1111/j.1749-4877.2008.00139.x.
- Strickler, AG., Soares D. 2011. Comparative genetics of the central nervous system in epigean and hypogean *Astyanax mexicanus*. *Genetica.* 2011 Mar;139(3):383-91. doi: 10.1007/s10709-011-9557-1. Epub 2011 Feb 13.
- Strickler, AG., Yamamoto Y., Jeffery, W.R. 2001. Early and late changes in Pax6 expression accompany eye degeneration during cavefish development. *Dev Genes Evol.* 2001 Mar;211(3):138-44.
- Strickler, AG., Yamamoto Y., Jeffery, W.R. 2007. The lens controls cell survival in the retina: Evidence from the blind cavefish *Astyanax*. *Developmental Biology.* 2007 Nov 15;311(2):512-23. Epub 2007 Sep 7.
- Sumi, Keina, Asaoka, Ryu, Nakae, Masanor, I and Sasaki, Kunio. 2015. Innervation of the lateral line system in the blind cavefish *Astyanax mexicanus* (Characidae) and comparisons with the eyed surface-dwelling form *Ichthyological Research*, 62:420-430.
- Sutherland, L., Holbrook, RI., and Burt de Perera, T. 2009. Sensory system affects orientational strategy in a short-range spatial task in blind and eyed morphs of the fish, *Astyanax fasciatus*. *Ethology*, 115:504-510.
- Tabata, Mitsuo. 1982. Persistence of pineal photosensory function in blind cave fish, *Astyanax mexicanus*. *Comp. Biochem. Physiol.* 73A(1):125-127.
- Tabin, Clifford J.. 2015. Introduction: The emergence of the Mexican cavefish as an important model system for understanding phenotypic evolution. Introduction, pp.1-5 In: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), *Biology and Evolution of the Mexican Cavefish*. Academic Press (Elsevier), Amsterdam. 404 pp.
- Tabin, Julius, Nicolas Rohner, Alexander Haro, Johanna Kowalko, Brian Martineau, Richard Borowsky, Cliff Tabin. 2015. The evolution of temperature [preference] in *Astyanax*. AIM 2015 posters:33.
- Tabin, Julius, Nicolas Rohner, Alexander Haro, Johanna Kowalko, Brian Martineau, Richard Borowsky, Cliff Tabin. 2017. The evolution of temperature preference in the Mexican cave fish *Astyanax mexicanus*. AIM 2017:20.
- Tabor, Kathryn M., and Harold A. Burgess. 2015. Transgenesis and future applications for cavefish research. Chapter 19, pp. 379-392 IN: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), *Biology and Evolution of the Mexican Cavefish*. Academic Press (Elsevier), Amsterdam. 404 pp.
- Teyke, Thomas. 1985. Collision with and avoidance of obstacles by blind cave fish *Anoptichthys jordani* (Characidae). *Journal of Comparative Physiology*, 157A:837-843.
- Teyke, Thomas. 1989. Learning and remembering the environment in the blind cave fish *Anoptichthys jordani*. *Journal of Comparative Physiology*, 164A:655-662.
- Teyke, Thomas. 1990. Morphological differences in neuromasts of the blind cave fish *Astyanax hubbsi* and the sighted river fish *Astyanax mexicanus*. *Brain Behav. Evol.* 35:23-30.
- Teyke, Thomas. 1990. Morphological differences in neuromasts of the blind cave fish *Astyanax hubbsi* and the sighted river fish *Astyanax mexicanus*. *Brain Behav Evol.* 1990;35(1):23-30.
- Teyke, Thomas, and Stephanie Schaerer. 1994. Blind Mexican cave fish (*Astyanax hubbsi*) respond to moving visual stimuli. *Journal of Experimental Biology*, 188:89-101.
- Thinès, Georges. 1954. Étude comparative de la photosensibilité des poissons aveugles. *Caecobarbus geertsii* Blgr. et *Anoptichthys jordani* Hubbs & Innes. *Annales de la Société Royale Zoologique de Belgique*, 85(1):35-58.
- Thinès, Georges and J.-M Legrain. 1973. Effets de la substance d'alarme sur le comportement des poissons cavernicoles *Anoptichthys jordani* (Characidae) et *Caecobarbus geertsii* (Cyprinidae). *Annales de Spéléologie*, 28(2):291-297.
- Thinès, Georges and Joachim Kähling. 1957. Untersuchungen über die Farbempfindlichkeit des Höhlenfisches *Anoptichthys jordani* Hubbs und Innes (Characidae). *Zeitschrift für Biologie*, 109(2):150-160.
- Thinès, Georges and M. Weyers. 1978. Réponses locomotrices du poisson cavernicole *Astyanax jordani* (Pisces, Characidae) à des signaux périodiques et apériodiques de lumière et de température. *International Journal of Speleology*, 10(1):35-55.
- Thinès, Georges and Nicole Wissocq. 1972. Étude comparée du comportement alimentaire de deux poissons cavernicoles (*Anoptichthys jordani* Hubbs et Innes et *Caecobarbus geertsii* Blgr.). *International Journal of Speleology*, 4(2):139- 169.
- Thinès, Georges and Wissocq, Nicole 1972. Etude comparee du comportement alimentaire de deux poissons cavernicoles

- (*Anoptichthys jordani* Hubbs et Innes et *Caecobarbus geertsi* Blgr.). International Journal of Speleology, 4:139-169.
- Thinès, Georges, F. Wolff-van Ermengem, C. Boucquey, and Monique Soffié. 1966. Étude comparative de l'activité du poisson cavernicole *Anoptichthys antrobius* Alvarez, et de son ancêtre epige *Astyanax mexicanus* (Filippi). Annales de la Société Royale Zoologique de Belgique, 96:61-115.
- Thinès, Georges, Monique Soffié, and Erik Vandenbussche. 1967. Analyse du comportement alimentaire du poisson cavernicole aveugle *Anoptichthys* Gen. et d'hybrides F1 (*Astyanax* x *Anoptichthys*) et F2. International Journal of Speleology, 2(4):437-448.
- Thinès, Georges, Sofie, Monique, and Vandenbussche, Erik. 1967. Analyse du comportement alimentaire du poisson cavernicole aveugle *Anoptichthys* Gen. Et d'hybrides F1 (*Astyanax* x *Anoptichthys*) et F2. International Journal of Speleology, 2:437-448.
- Thomsen, Rebne, and N. Wilding. 1960. La Cueva del Abra. The Nittany Grotto Newsletter, 8(4):60.
- Thomsen, Rebne, and N. Wilding. 1962. La Cueva del Abra (Mexico). Speleo Digest, 1960(1):207.
- Tian NM., Price DJ. 2005. Why cavefish are blind. Bioessays. 2005 Mar;27(3):235-8. Review.
- Trajano, E. 1987. Fauna cavernícola brasileira: composição e caracterização preliminar. Revista Brasileira de Zoologia, Sao Paulo, 3(8):533-561.
- Valdez-Moreno, M and Contreras-Balderas, S. 2003. Skull osteology of the characid fish *Astyanax mexicanus* (Teleostei: Characidae). Proceedings of the Biological Society of Washington, 116:341-355.
- Valdez-Moreno, M and Contreras-Balderas, S. 2004. Skull osteology of the characid fish *Astyanax mexicanus* (Teleostei: Characidae). Proceedings of the Biological Society of Washington, 116:341-355.
- Van Trump, W. J. and McHenry, M. J. 2013. The lateral line system is not necessary for rheotaxis in the Mexican blind cavefish (*Astyanax fasciatus*). Integrative and Comparative Biology, 53:799-809.
- Varatharasan N., Croll RP., Franz-Odenaal T. 2009. Taste bud development and patterning in sighted and blind Vazquez-Echeverria, C., Guibal, C., Reynoso, VH., Carrillo-Rosas, S., Ramos-Balderas, JL., and Maldonado, E. 2011. Cloning ear development related genes in *Astyanax mexicanus* AIM meeting 2011:33.
- Villa R., Bernardo. 1967. Los murciélagos de México. México, D.F.: Universidad Nacional Autónoma de México. xvi + 491 pp.
- Villalobos Figueroa, Alejandro. 1974. Una nueva especie de Troglolobus (Crustacea, Decapoda, Palaemonidae), de San Luis Potosí, México. Anales del Instituto de Biología, Universidad Nacional Autónoma de México, 42, Serie Ciencias del Mar y Limnología, (1):1-6.
- Volkoff, Hélène. 2015. Feeding behavior, starvation response, and endocrine regulation of feeding in Mexican blind cavefish (*Astyanax fasciatus mexicanus*). Chapter 14, pp. 269-290 In: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), Biology and Evolution of the Mexican Cavefish. Academic Press (Elsevier), Amsterdam. 404 pp.
- Vomero, Vincenzo. 1973. Stato attuale delle conoscenze sugli Histeridae ipogei. International Journal of Speleology, 5(3-4):361-367.
- Voneida TJ., Sligar CM. 1976. A comparative neuroanatomic study of retinal projections in two fishes: *Astyanax hubbsi* (the blind cave fish), and *Astyanax mexicanus*. J Comp Neurol. 1976 Jan 1;165(1):89-105.
- Voneida, Theodore J. 1973. A comparative study of retinotectal projections in the blind cave characin, *Astyanax hubbsi*, and its sighted ancestor, *Astyanax mexicanus*. (Abstract). Anatomical Record, 175:462- 463.
- Voneida, Theodore J., and Catherine M. Sligar. 1976. A comparative neuroanatomic study of retinal projections in two fishes: *Astyanax hubbsi* (the blind cave fish), and *Astyanax mexicanus*. The Journal of Comparative Neurology, 165(1):89-105.
- Voneida, Theodore J., and Stephen E. Fish. 1984. Central nervous system changes related to the reduction of visual input in a naturally blind fish (*Astyanax hubbsi*). Am. Zool, 24:775-792.
- Wall, A. and Volkoff, H. 2013. Effects of fasting and feeding on the brain mRNA expressions of orexin, tyrosine hydroxylase (TH), PYY and CCK in the Mexican blind cavefish (*Astyanax fasciatus mexicanus*). General and Comparative Endocrinology, 183:44-52.
- Walsh, John Mike. 1972. Mexican caving of the Southwest Texas Grotto 1966-1971. Southwest Texas Grotto, San Marcos. 146 pp.
- Walsh, Stephen J., and Carter R. Gilbert. 1995. New species of troglolobitic catfish of the genus *Prietella* (Siluriformes: Ictaluridae) from northeastern México. Copeia, 1995(4):850-861.
- Warton, Mike L. 1984. México news: Tamaulipas: "Mike Warton and Frank Maloney..." AMCS Activities Newsletter, no. 14:16-17.
- Warton, Mike L. 1985. Trip report. Destination: Cave hunting in areas west of Cd. Ocampo, Tam, Mexico, including Sotano de Vasquez, Sotano del Arroyo and Sotano de las Golondrinas. The Texas Caver, 30(5):107- 108.

- Weiss, B. A. 1969. Sonic sensitivity of blind cave fish (*Anoptichthys jordani*). *Journal of Acoustic Science*, 45:300.
- Weiss, Burton A., and Janie L. Martini. 1970. Lateral-line sensitivity in the blind cavefish (*Anoptichthys* Weissert, R. 1979. Dressurexperimente und Verhaltensbeobachtungen zum Formunterscheidungsvermögen des blinden Höhlenfisches *Anoptichthys jordani* (Hubbs et Innes). Dissertation, Mainz.
- Weissert, R. 1980. Formunterscheidung durch einen blinden Höhlenfisch (*Anoptichthys jordani*, Hubbs et Innes). Pp. 213-217 in J.J. Jensen, ed, *Kybernetik 1980/Cybernetics 1980, Kooperative Systeme in Biologie und Technik*. Oldenbourg, München.
- Weissert, R., and C. Von Campenhausen. 1981. Discrimination between stationary objects by the blind cave fish, *Anoptichthys jordani* (Characidae). *Journal of Comparative Physiology*, 143A:375-381.
- Whitmore, D., Guibal, C., Tamai, K and Yamamoto, Y. 2009. Circadian clocks and light sensitivity in *Astyanax* cell lines. *Proceedings of the first International Astyanax meeting, Ciudad Valles, Mexico*:36.
- Whitt, Gregory S., and Frances S. Maeda. 1970. Lactate dehydrogenase gene function in the blind cave fish, *Anoptichthys jordani*, and other characins. *Biochemical Genetics*, 4:727-741.
- Wiley, Suzanne, and Robert W. Mitchell. 1971. A bibliography of the Mexican eyeless characin fishes of the genus *Astyanax*. *Association for Mexican Cave Studies Bulletin*, 4:231-239.
- Wiley, Suzanne, and Robert W. Mitchell. 1971. A bibliography of the Mexican eyeless characin fishes of the genus *Astyanax*. Preliminary compilation and letter. Lubbock, Texas: Privately printed. 12 pp.
- Wilkens, Horst, and Kathrin Hüppop. 1986. Sympatric speciation in cave fishes? Studies on a mixed population of epi- and hypogean *Astyanax* (Characidae, Pisces). *Zeitschrift für Zoologische Systematik und Evolutionsforschung*, 24(3):223-230.
- Wilkens, Horst, and Kathrin Lubeck. 1985. Non-allopatric speciation in cave fishes: Studies in epigeal and hypogean *Astyanax* populations (Characidae, Pisces). (Abstract). P. 4 in: G. Thomas Rea, ed, *Proceedings of the National Speleological Society Annual Meeting, June 24 - June 28, 1985, Frankfort, Kentucky*. Inserted in: *The NSS Bulletin*, 47(1).
- Wilkens, Horst, and Richard J. Burns. 1972. A new *Anoptichthys* cave population (Characidae, Pisces). *Annales de Spéléologie*, 27(1):263-270.
- Wilkens, Horst, and Ulrike Strecker. 2003. Convergent evolution of the cavefish *Astyanax* (Characidae, Teleostei): genetic evidence from reduced eye-size and pigmentation. *Biological Journal of the Linnean Society*, 80:545-554.
- Wilkens, Horst, and Ulrike Strecker. 2017. *Evolution in the Dark: Darwin's Loss Without Selection*. Springer, 217 pp. ISBN-10: 3662545101
- Wilkens, Horst, T. G. Langecker, and J. Olcese. 1993. Circadian rhythms of melatonin synthesis in the pineal organ of cave-dwelling *Astyanax fasciatus* (Teleostei: Characidae). *Memoires de Biospéologie*, 20:279-282.
- Wilkens, Horst, Thomas G. Langecker, and J. Olcese. 1991. Pineal reduction and melatonin content in *Astyanax fasciatus* cave fish. (Abstract). P. 35 in: *Program & Abstracts, International Symposium of Biospeleology, Société de Biospéologie, Tenerife – Canary Islands 7-12 September 1992*.
- Wilkens, Horst. 1968. Beitrag zur Degeneration des Auges bei Cavernicolen, Genzahl und Manifestationsart (Untersuchungen am mexikanischen Höhlenfischen). *Zoologischer Anzeiger*, 180:454-464.
- Wilkens, Horst. 1970. Beiträge zur Degeneration des Auges bei Cavernicolen, Genzahl und Manifestationsart. Untersuchungen an mexikanischen Höhlenfischen. *Zeitschrift für Zoologische Systematik und Evolutionsforschung*, 8(1):1-47.
- Wilkens, Horst. 1970. Beiträge zur Degeneration des Melaninpigments bei cavernicolen Sippen des *Astyanax* Wilkens, Horst. 1970. Der Bau des Auges cavernicolen Sippen von *Astyanax fasciatus* (Characidae, Pisces). Beitrag zur Problematik degenerativer Evolutionsprozesse. *Wilhelm Roux' Archiv für Entwicklungsmechanik*, 166:54-75.
- Wilkens, Horst. 1971. Genetic interpretation of regressive evolutionary processes: Studies on hybrid eyes of two *Astyanax* cave populations (Characidae, Pisces). *Evolution*, 25(3):530-544.
- Wilkens, Horst. 1972. Zur Phylogenetischen Rückbildung des Auges cavernicolen: Untersuchungen an *Anoptichthys jordani* (= *Astyanax mexicanus*), Characidae, Pisces. *Annales de Spéléologie*, 27(2):411-432.
- Wilkens, Horst. 1972. Über Präadaptationen für das Höhlenleben, untersucht am Laichverhalten ober- und unterirdischer Populationen des *Astyanax mexicanus* (Pisces). *Zoologischer Anzeiger*, 188(1-2):1-11.
- Wilkens, Horst. 1973. Über das phylogenetische Alter von Höhlentieren. Untersuchungen über die cavernicole Süßwasserfauna Yucatans. *Zeitschrift für Zoologische Systematik und Evolutionsforschung*, 11(1):49-60.
- Wilkens, Horst. 1973. Über degenerative and konstruktive Merkmale bei einer phylogenetisch jungen Höhlenform von *Poecilia sphenops* (Pisces, Poeciliidae). *Int. Rev. ges-Hydrobiol*, 58:417-436.
- Wilkens, Horst. 1976. Genotypic and phenotypic variability in cave animals. Studies on a phylogenetically young cave population of *Astyanax mexicanus* (Filippi) (Characidae, Pisces). *Annales de Spéléologie*, 31:137- 148.

- Wilkens, Horst. 1977. Die Rudimentation des Rumpfkanals bei kavernikolen Populationen des *Astyanax* (Characidae, Pisces). *Experientia*, 33:604-605.
- Wilkens, Horst. 1980. Zur Problematik der Rudimentation, untersucht an der Ontogenie des Auges von Höhlenfischen (*Astyanax mexicanus*). *Zeitschrift für Zoologische Systematik und Evolutionsforschung*, 18(3):232-238.
- Wilkens, Horst. 1980. Prinzipien der Manifestation polygener Systeme. *Zeitschrift für Zoologische Systematik und Evolutionsforschung*, 18(2):103-111.
- Wilkens, Horst. 1981. Regressive evolution and phylogenetic age. (Abstract). Proceedings of the Eighth International Congress of Speleology, Bowling Green, Kentucky, U.S.A., 2:622.
- Wilkens, Horst. 1982. Regressive evolution and phylogenetic age: The history of colonization of freshwaters of Yucatan by fish and Crustacea. *Association for Mexican Cave Studies, Bulletin*, 8:237-243.
- Wilkens, Horst. 1984. Zur Evolution von Polygensystemen: Untersucht an ober- und unterirdischen Populationen des *Astyanax mexicanus* (Characidae, Pisces). *Fortschr. zool. Evolut.-forsch. Beiheft*, 3:55-71.
- Wilkens, Horst. 1985. Non-allopatric speciation in cave fishes: Studies in epigeal and hypogean *Astyanax* populations (Characidae, Pisces). (Abstract). Program for the 1985 NSS convention, Frankfort, Kentucky, June 23-29, p. 36.
- Wilkens, Horst. 1986. The evolution of polygenic systems, studied on epigeal and cave populations of *Astyanax fasciatus* (Characidae, Pisces). *The NSS Bulletin*, 47(2):101-108.
- Wilkens, Horst. 1987. Genetic analysis of evolutionary processes. *International Journal of Speleology*, 16(1- 2):33-58.
- Wilkens, Horst. 1988. Evolution and genetics of epigeal and cave *Astyanax fasciatus* (Characidae, Pisces). Support for the neutral mutation theory. *Evolutionary Biology*, 23:271-367.
- Wilkens, Horst. 1989. Genetic analysis of evolutionary processes. (Abstract). *Notas de Información Bioespeológica de América Latina y el Caribe*, 2:3.
- Wilkens, Horst. 1992. Neutral mutations and evolutionary progress. Pp. 402-422 in: Ana Isabel Camacho, ed, *The natural history of biospeleology. Monografías del Museo Nacional de Ciencias Naturales*.
- Wilkens, Horst. 1993. Neutral Mutationen-und evolutionäre Fortentwicklungprogress. *Zeitschrift für Zoologische Systematik und Evolutionsforschung*, 31(2):98-109.
- Wilkens, Horst. 1998. Pisces (Teleostei). C – Genetics of cave fishes. Pp. 1201-1206 in: Christian Juberthie and Vasile Decu, eds, *Encyclopaedia Biospeologica*, 2. Moulis: Société de Biospéologie.
- Wilkens, Horst. 2002. Convergence of *Astyanax* cave fish evolution: Genetic evidence from eye reduction. *Proceedings of the 16th International Symposium of Biospeleology, Verona, September 2002*: 69.
- Wilkens, Horst. 2011. Variability and loss of functionless traits in cave animals. Reply to Jeffery (2010) *Heredity*, 106:707-708. doi:10.1038/hdy.2010.105
- Wilkens, Horst. 2016. Genetics and hybridization in surface and cave *Astyanax* (Teleostei): a comparison of regressive and constructive traits. *Biological Journal of the Linnean Society*.
- Windsor S., Paris J., de Perera TB. 2011. No role for direct touch using the pectoral fins, as an information gathering strategy in a blind fish. *J Comp Physiol A Neuroethol Sens Neural Behav Physiol*. 2011 Apr;197(4):321-7. doi: 10.1007/s00359-010- 0615-4. Epub 2010 Dec 14.
- Windsor SP., Norris SE., Cameron SM., Mallinson GD., Montgomery JC. 2010. The flow fields involved in hydrodynamic imaging by blind Mexican cave fish (*Astyanax fasciatus*). Part I: open water and heading towards a wall. *J Exp Biol*. 2010 Nov 15;213(Pt 22):3819-31. doi: 10.1242/jeb.040741.
- Windsor SP., Norris SE., Cameron SM., Mallinson GD., Montgomery JC. 2010. The flow fields involved in hydrodynamic imaging by blind Mexican cave fish (*Astyanax fasciatus*). Part II: gliding parallel to a wall. *J Exp Biol*. 2010 Nov 15;213(Pt 22):3832-42. doi: 10.1242/jeb.040790.
- Windsor SP., Tan D., Montgomery JC. 2008. Swimming kinematics and hydrodynamic imaging in the blind Mexican cave fish (*Astyanax fasciatus*). *Journal of Experimental Biology*, 2008 Sep;211(Pt 18):2950-2959. doi: 10.1242/jeb.020453.
- Windsor, S., Mallinson, G and Montgomery, J. 2008. Hydrodynamic imaging by blind Mexican cave fish (*Astyanax fasciatus*). *Comparative Biochemistry and Physiology*, 150A:S79.
- Windsor, S. 2009. Hydrodynamic imaging in blind Mexican cave fish. *Proceedings of the first International Astyanax meeting, Ciudad Valles, Mexico*:38.
- Woodhead, A.D., and P.M. Achey. 1978. Photoreactivating enzyme in the blind cave fish, *Anoptichthys jordani*. *Comp. Biochem. Physiol*, 63B:73-76.
- Yamamoto Y., Byerly MS., Jackman W.R., Jeffery, W.R. 2009. Pleiotropic functions of embryonic sonic hedgehog expression link jaw and taste bud amplification with eye loss during cavefish evolution. *Dev Biol*. 2009 Jun 1;330(1):200-11. doi: 10.1016/j.ydbio.2009.03.003. Epub 2009 Mar 11.

- Yamamoto Y., Jeffery, W.R. 2001. Central role for the lens in cave fish eye degeneration. *Science*. 2000 Jul 28;289(5479):631-3. Erratum in: *Science* 2001 Mar 30;291(5513):2551.
- Yamamoto Y., Stock DW., Jeffery, W.R. 2004. Hedgehog signalling controls eye degeneration in blind cavefish. *Nature*. 2004 Oct 14;431(7010):844-7.
- Yamamoto, Y., Luis Espinasa, D.W. Stock, and William R. Jeffery. 2003. Development and evolution of craniofacial patterning is mediated by eye-dependent and -independent processes in the cavefish *Astyanax*. *Evolution and Development*. 2003 Sep-Oct;5(5):435-46.
- Yamamoto, Y., Espinasa, L., Stock, DW and Jeffery, WR. 2004. Development and Evolution of craniofacial patterning is mediated by eye-dependant and -independent processes in the cavefish *Astyanax*. *Evolution and Development*, 5:435-456.
- Yamamoto, Y., Luis Espinasa, D.W. Stock, and William R. Jeffery. 2003. Development and evolution of craniofacial patterning is mediated by eye-dependent and -independent processes in the cavefish *Astyanax*. *Evol Dev*. 2003 Sep-Oct;5(5):435-46.
- Yamamoto, Yoshiyuki. 2015. Molecular mechanisms of eye degeneration in cavefish. Chapter 9, pp. 175-192. In: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), *Biology and Evolution of the Mexican Cavefish*. Academic Press (Elsevier), Amsterdam. 404 pp.
- Yamamoto, Yoshiyuuki, and William R. Jeffery. 2000. Central role for the lens in cave fish eye degeneration. *Science*, 289(5479):631-633.
- Yamamoto, Yoshiyuuki, and William R. Jeffery. 2001. Mexico news: Tamaulipas: "The fish *Astyanax mexicanus*..." AMCS Activities Newsletter, no. 24:18.
- Yamamoto, Yoshiyuuki, D.W.Stock, and William R. Jeffery. 2004. Hedgehog signalling controls eye degeneration in blind cavefish. *Nature*. 2004 Oct 14;431(7010):844-7.
- Yamamoto, Yoshiyuuki, M.S. Byerly, W.R. Jackman, and W.R. Jeffery. 2004. Pleiotropic functions of embryonic sonic hedgehog expression link jaw and taste bud amplification with eye loss during cavefish evolution. *Dev Biol*. 2009 Jun 1;330(1):200-11. doi: 10.1016/j.ydbio.2009.03.003. Epub 2009 Mar 11.
- Yew DT., Yoshihara HM. 1977. An ultrastructural study on the retina of the blind cave fish (*Astyanax hubbsi*). *Cytologia* (Tokyo). 1977 Jan;42(1):175-80.
- Yew, David T., and Henry M. Yoshihara. 1977. An ultrastructural study on the retina of the blind cave fish (*Astyanax hubbsi*). *Cytologia*, 42:175-180.
- Yokoyama R., Yokoyama S. 1990. Isolation, DNA sequence and evolution of a color visual pigment gene of the blind cave fish *Astyanax fasciatus*. *Vision Res*. 1990;30(6):807-16.
- Yokoyama R., Yokoyama S. 1990. Convergent evolution of the red- and green-like visual pigment genes in fish, *Astyanax fasciatus*, and human. *Proc Natl Acad Sci U S A*. 1990 Dec;87(23):9315-8.
- Yokoyama S., Meany A., Wilkens H., Yokoyama R. 1995. Initial mutational steps toward loss of opsin gene function in cavefish. *Mol Biol Evol*. 1995 Jul;12(4):527-32.
- Yokoyama S., Radlwimmer FB. 2001. The molecular genetics and evolution of red and green color vision in vertebrates. *Genetics*. 2001 Aug;158(4):1697-710.
- Yokoyama, R., and S. Yokoyama. 1990. Isolation, DNA sequence and evolution of a color visual pigment gene of the blind cave fish *Astyanax fasciatus*. *Vision Res*, 30(6):807-816.
- Yokoyama, R., B. E. Knox, and S. Yokoyama. 1995. Rhodopsin from the fish, *Astyanax*: Role of Tyrosine 261 in the Red Shift. *Investigative Ophthalmology & Visual Science*, 36(5):939-945.
- Yokoyama R, Yokoyama S. 1990. Convergent evolution of the red- and green-like visual pigment genes in fish, *Astyanax fasciatus*, and human. *Proc Natl Acad Sci U S A*. 1990 Dec;87(23):9315-8.
- Yoshizawa, Masato. 2015. Behaviors of cavefish offer insight into developmental evolution. *Mol Reprod Dev*. 2015 Apr;82(4):268-80. doi: 10.1002/mrd.22471. Epub 2015 Feb 27.
- Yoshizawa, Masato. 2015. The evolution of sensory adaptation in *Astyanax mexicanus*. Chapter 13, pp. 247- 267 In: Keene, Alex C., Masato Yoshizawa, and Suzanne E. McGaugh (eds.), *Biology and Evolution of the Mexican Cavefish*. Academic Press (Elsevier), Amsterdam. 404 pp.
- Yoshizawa M., and Jeffery, W.R. 2011. Evolutionary tuning of an adaptive behavior requires enhancement of the neuromast sensory system. *Commun Integr Biol*. 2011 Jan;4(1):89-91. doi: 10.4161/cib.4.1.14118.
- Yoshizawa M., and Jeffery, W.R. 2011. Evolution of a behavior mediated by the lateral line system adapts *Astyanax* to life in darkness. AIM meeting 2011:24.
- Yoshizawa M., Ashida G., Jeffery, W.R. 2012. Parental genetic effects in a cavefish adaptive behavior explain disparity between nuclear and mitochondrial DNA. *Evolution*. 2012 Sep;66(9):2975-82. doi: 10.1111/j.1558-

- 5646.2012.01651.x. Epub 2012 May 7.
- Yoshizawa M., Goricki S., Soares D., Jeffery, W.R. 2010. Evolution of a behavioral shift mediated by superficial neuromasts helps cavefish find food in darkness. *Current Biology*. 2010 Sep 28;20(18):1631-1636. doi: 10.1016/j.cub.2010.07.017. Epub 2010 Aug 12.
- Yoshizawa M., Jeffery W.R., van Netten SM., McHenry MJ. 2014. The sensitivity of lateral line receptors and their role in the behavior of Mexican blind cavefish (*Astyanax mexicanus*). *J Exp Biol*. 2014 Mar 15;217(Pt 6):886-95. doi: 10.1242/jeb.094599. Epub 2013 Nov 21.
- Yoshizawa M., Jeffery, W.R. 2008. Shadow response in the blind cavefish *Astyanax* reveals conservation of a functional pineal eye. *Journal of Experimental Biology*. 2008 Feb;211(Pt 3):292-9. doi: 10.1242/jeb.012864.
- Yoshizawa M., O'Quin KE., and Jeffery, W.R. 2013. Evolution of an adaptive behavior and its sensory receptors promotes eye regression in blind cavefish: Response to Borowsky (2013). *BMC Biol*. 2013 Jul 11;11:82. doi: 10.1186/1741-7007-11-82.
- Yoshizawa M., O'Quin KE., and Jeffery, WR. 2013. QTL clustering as a mechanism for rapid multi-trait evolution. *Commun Integr Biol*. 2013 Jul 1;6(4):e24548. doi: 10.4161/cib.24548. Epub 2013 Apr 12.
- Yoshizawa M., Robinson BG., Duboué ER., Masek P., Jaggard JB., O'Quin KE., Borowsky RL., Jeffery W.R., Keene AC. 2015. Distinct genetic architecture underlies the emergence of sleep loss and prey-seeking behavior in the Mexican cavefish. *BMC Biol*. 2015 Feb 20;13(1):15. doi: 10.1186/s12915-015-0119-3.
- Yoshizawa M., Yamamoto Y., O'Quin KE., Jeffery, W.R. 2012. Evolution of an adaptive behavior and its sensory receptors promotes eye regression in blind cavefish. *BMC Biol*. 2012 Dec 27;10:108. doi: 10.1186/1741-7007-10-108.
- Yoshizawa M., S.Goricki, D. Soares D., and W.R. Jeffery. 2010. Evolution of a behavioral shift mediated by superficial neuromasts helps cavefish find food in darkness. *Curr Biol*. 2010 Sep 28;20(18):1631-6. doi: 10.1016/j.cub.2010.07.017. Epub 2010 Aug 12.
- Yoshizawa, M., and Jeffery, WR. 2011. Evolution of a behaviour mediated by the lateral line system adapts *Astyanax* to life in darkness. AIM meeting 2011:24.
- Yoshizawa, M., Soares, D., Goricki, S., Ashida, G and Jeffery, WR. 2009. Evolution of adaptive behaviors in the cavefish *Astyanax*. Proceedings of the first International *Astyanax* meeting, Ciudad Valles, Mexico:26.
- Yoshizawa, Masato, and Christian Macaspac. 2015. How to build a DIY water-flow system that successfully makes cavefish spawn. AIM 2015 posters:28.
- Yoshizawa, Masato, Kelly E. O'Quin, Go Ashida, and William R. Jeffery. 2013. Adaptive changes in vibration attraction behavior and its sensory receptors promote eye degeneration and disparity between the nuclear and mitochondrial genomes in Pachón cavefish. AIM 2013 abstracts:29.
- Zaccone, G. 1977. Histology, innervation and histochemistry of the UB gland in the Mexican cave fish *Anoptichthys jordani* Hubbs et Innes (Teleostei: Characidae). *Acta Histochem*, 58:31-38.
- Zaccone, Giacomo. 1972. Comparative histochemical investigations on the mucous cells of the branchial epithelium of *Mugil cephalus* L. and *Anoptichthys jordani* Hubbs and Innes. *Acta Histochem*, 44:106-115.
- Zagmajster M., M.L. Porter, and D.W. Fong. 2011. Freshwater hydrozoans in caves with report on new records. *SPBN* 3: 4-10.
- Zeitlin, S. M. 1973. Hormonal induction of ovulation and spawning in the blind cave fish, *Anoptichthys jordani* with the use of human chorionic gonadotropin. *Experientia*, 29:461-462.
- Zilles K., Tillmann B., Bennemann R. 1983. The development of the eye in *Astyanax mexicanus* (Characidae, Pisces), its blind cave derivative, *Anoptichthys jordani* (Characidae, Pisces), and their crossbreds. A scanning- and transmission-electron microscopic study. *Cell Tissue Res*. 1983;229(2):423-32.
- Zilles, Karl, Bernhard Tillmann, and Rolf Bennemann. 1983. The development of the eye in *Astyanax mexicanus* (Characidae, Pisces), its blind cave derivative, *Anoptichthys jordani* (Characidae, Pisces), and their crossbreds. A scanning- and transmission-electron microscopic study. *Cell and Tissue Research*, 229:423- 432.
- Zueckert-Gaudenz, Karin, Andrew Box, Mihaela Sardu, and Nicolas Rohner. 2017. Effect of insulin receptor mutation P211L on insulin resistance in cavefish. AIM 2017 posters:58.

