

Archibald Lab publications (December 2023)

179. Bougon, J., Kadijk, E.C., Gallot-Lavallée, L., Curtis, B.A., Landers, M., **Archibald, J.M.** & Khapersky, D. A. 2023. Influenza A virus NS1 effector domain is required for PA-X mediated host shutoff. *BioRxiv preprint*: 10.1101/2023.10.02.560421.

178. Jerlström-Hultqvist, J., Gallot-Lavallée, L., Salas-Leiva, D., Curtis, B. A., Pašuthová, K., Čepička, I., Stairs, C., Pipaliya, S., Dacks, J., **Archibald, J. M.**, & Roger, A. J. 2023. A unique symbiosome in an anaerobic single-celled eukaryote. *bioRxiv preprint*: doi: 10.1101/2023.03.03.530753.

177. Feng X, Zheng J, Irisarri I, Yu H, Zheng B, Ali Z, de Vries S, Keller J, Fürst-Jansen JMR, Dadras A, Zegers JMS, Rieseberg TP, Ashok AD, Darienko T, Bierenbroodspot MJ, Gramzow L, Petroll R, Haas FB, Fernandez-Pozo N, Nousias O, Li T, Fitzek E, Grayburn WS, Rittmeier N, Permann C, Rümpler F, **Archibald JM**, Theißen G, Mower JP, Lorenz M, Buschmann H, von Schwartzberg K, Boston L, Hayes RD, Daum C, Barry K, Grigoriev IV, Wang X, Li FW, Rensing SA, Ari JB, Keren N, Mosquna A, Holzinger A, Delaux PM, Zhang C, Huang J, Mutwil M, de Vries J, Yin Y. 2023. Chromosome-level genomes of multicellular algal sisters to land plants illuminate signaling network evolution. *bioRxiv preprint*. 1:2023.01.31.526407.

176. Gallot-Lavallée, L., Jerlström-Hultqvist, J., Stairs, C. W., Cepicka, I., Roger, A. J., & **Archibald, J. M.** 2023. Massive intein content in three *Anaeramoeba* genomes reveals new aspects of intein mobility in eukaryotes. *Proc. Natl. Acad. Sci. USA*. 120, 49: e2306381120.

175. Collier, J. L., Rest, J. S., Lavington, E., Gallot-Lavallée, L., Kuo, A., Jenkins, J., Pangilinan, J. Daum, C., Grigoriev, I. V., Filloramo, G. F., Curtis, B. A., Vanclova, A., & **Archibald, J. M.** 2023. The protist *Aurantiochytrium* has universal subtelomeric rDNAs and is a host for mirusviruses. *Curr. Biol.* 33, 5199-5207.

174. Rius, M., Rest, J. S., Filloramo, G., Vanclova, A., **Archibald, J. M.**, & Collier, J.L. 2023. Horizontal gene transfer and fusion spread carotenogenesis among diverse heterotrophic protists. *Genome. Biol. Evol.* doi.org/10.1093/gbe/evad029.

173. Zhang, X., Hu, Y., Cheng, Z. & **Archibald, J. M.** 2023. HSDecipher: A pipeline for comparative genomic analysis of highly similar duplicate genes in eukaryotic genomes. *STAR Protocols*. 4, 102014.

172. Kim, J. I., Tanifuji, G., Minseok, J., Shin, W., & **Archibald, J. M.** 2022. Gene loss, pseudogenization and genome reduction in non-photosynthetic species of *Cryptomonas* (Cryptophyceae) revealed by comparative nucleomorph genomics. *BMC Biol.* 20:227.

171. Hess, S., Williams, S, Busch, A., Irisarri, I., Delwiche, C.F., de Vries, S., Darienko, T., Roger, A.J., **Archibald, J. M.**, Buschmann, H., von Schwartzberg, K., & de Vries, J. 2022. A phylogenomically informed five-order system for the closest relatives of land plants. *Curr. Biol.* 32, 1-10.

170. Matthey-Doret*, C., Colp*, M. J., Escoll Guerrero, P., Thierry, A., Curtis, B. A., Sarrain, M., Gray, M.W., Lang B.F., **Archibald, J. M.**, Buchrieser, C., & Koszul, R. 2022. Chromosome-scale assemblies of *Acanthamoeba castellanii* genomes provide insights into *Legionella pneumophila* infection-related chromatin re-organization. *Genome Res.* 32, 1698-1710.

169. Kim, J. I., Jo, B. Y., Park, M. G., Yoo, Y. D., Shin, W., & **Archibald, J. M.** 2022. Evolutionary dynamics and lateral gene transfer in raphidophycean plastid genomes. *Frontiers Plant Sci.* 13, doi:10.3389/fpls.2022. 896138.

168. Zhang, X., Hu, Y., Eme, L., Maruyama, S., Eveleigh, R. J. M., Curtis, B. A., Sibbald, S. J., Hopkins, J. F., Filloramo, G. V., van Wijk, K., & **Archibald, J. M.** 2022. Protocol for TreeTuner: A pipeline for minimizing redundancy and complexity in large phylogenetic datasets. *STAR Protocols.* 3, 101175.

167. Lawniczak, M. K. N., Durbin, R., Flicek, P., Lindblad-Toh, K., Wei, X., **Archibald, J. M.**, Baker, W. J., Belov, K., Blaxter, M. L., Marques Bonet, T., Childers, A. K., Coddington, J. A., Crandall, K. A., Crawford, A. J., Davey, R. P., Di Palma, F., Fang, Q., Haerty, W., Hall, N., Hoff, K. J., Howe, K., Jarvis, E. D., Johnson W. E., Johnson, R. N., Kersey, P. J., Liu, X., Lopez, J. V., Myers, E. W., Pettersson, O. V., Phillippy, A. M., Poelchau, M. F., Pruitt, K. D., Rhie, A., Castilla-Rubio, J. C., Sahu, S. K., Salmon, N. A., Soltis, P. S., Swarbreck, D., Thibaud-Nissen, F., Wang, S., Wegrzyn, J. L., Zhang, G., Zhang, H., Lewin, H. A., Richards, S. 2022. Standards recommendations for the Earth BioGenome Project. *Proc. Natl. Acad. Sci. USA.* 119, 4 e2115636118.

166. Blaxter, M., **Archibald, J. M.**, Childers, A. K., Coddington, J. A., Crandall, K. A., Di Palma, F., Durbin, R., Edwards, S. V., Graves, J. A. M., Hackett, K. J., Hall, N., Jarvis, E. D., Johnson, R. N., Karlsson, E. K., Kress, W. J., Kuraku, S., Lawniczak, M. K. N., Lindblad-Toh, K., Lopez, J. V., Moran, N.A., Robinson, G. E., Ryder, O. A., Shapiro, B., Soltis, P. S., Warnow, T., Zhang, G., & Lewin, H. A. 2022. Why sequence all eukaryotes? *Proc. Natl. Acad. Sci. USA.* 119, 4 e2115636118.

165. Lewin, H. A., Richards, S., Lieberman Aiden, E., Allende, M. L., **Archibald, J. M.**, Bálint, M., Barker, K. B., Baumgartner, B., Belov, K., Bertorelle, G., Blaxter, M.L., Cai, J., Caperello, N. D., Carlson, K., Castilla-Rubio, J. C., Chaw, S. M., Chen, L., Childers, A. K., Coddington, J. A., Conde, D. A., Corominas, M., Crandall, K. A., Crawford, A. J., DiPalma, F., Durbin, R., Ebenezer, T. E., Edwards, S. V., Fedrigo, O., Flicek, P., Formenti, G., Gibbs, R. A., Gilbert, M. T. P., Goldstein, M. M., Graves, J. M., Greely, H. T., Grigoriev, I. V., Hackett, K. J., Hall, N., Haussler, D., Helgen, K. M., Hogg, C. J., Isobe, S., Jakobsen, K. S., Janke, A., Jarvis, E. D., Johnson, W. E., Jones, S. J. M., Karlsson, E. K., Kersey, P. J., Kim, J. H., Kress, W. J., Kuraku, S., Lawniczak, M. K. N., Leebens-Mack, J. H., Li, X., Lindblad-Toh, K., Liu, X., Lopez, J. V., Marques-Bonet, T., Mazard, S., Mazet, J. A. K., Mazzoni, C. J., Myers, E. W., O'Neill, R. J., Paez, S., Park, H., Robinson, G. E., Roquet, C., Ryder, O. A., Sabir, J. S. M., Shaffer, H. B., Shank, T. M., Sherkow, J. S., Soltis, P. S., Tang, B., Tedersoo, L., Uliano-Silva, M., Wang, K., Wei, X., Wetzler, R., Wilson, J. L., Xu, X., Yang, H., Yoder, A. D., Zhang, G. 2022. The Earth BioGenome Project 2020: starting the clock. *Proc. Natl. Acad. Sci. USA.* 119, 4 e2115636118.

164. Fürst-Jansen, J. M. R., de Vries, S. von Schwartzberg, K. **Archibald, J. M.**, & de Vries, J. 2021. Submergence of the filamentous Zygnematophyceae *Mougeotia* induces differential gene expression patterns associated with photosynthesis. *Protoplasma.* doi: 10.1007/s00709-021-01730-1.

163. Wright, V., **Archibald, J. M.**, Beinart, R., Dawson, M.N., Hentschel, U., Keeling, P.J., Lopez, J.V., Martín-Durán, J.M., Petersen, J.M., Sigwart, J.D., Simakov, O., Sutherland, K.R., Sweet, M., Talbot, N., Thompson, A.W., Bender, S., Harrison, P.W., Rajan, J., Cochrane, G., Berriman, M., Lawniczak, M. & Blaxter, M. 2021. The Aquatic Symbiosis Genomics Project: probing the evolution of symbiosis across the tree of life. *Wellcome Open Res.* 6:254.

162. Salas-Leiva, D. E., Tromer, E. C., Curtis, B. A., Jerlstrom-Hultqvist, J., Kolisko, M., Yi, Z., Salas-Leiva, J. S., Gallot-Lavallée, L., Kops, J. J. P. L., **Archibald, J. M.**, Simpson, A. G. B., & Roger, A. J. 2021. Genomic analysis finds no evidence of canonical eukaryotic DNA processing systems in a free-living protist. *Nat. Comm.* 12:6003.
161. Rowarth, N. M., Curtis, B. A., Einfeldt, A. L., **Archibald, J. M.**, Lacroix, C. R., & Gunawardena, A. H. L. A. N. 2021. RNA-Seq analysis reveals potential regulators involved in program cell death and remodeling of lace plant leaves (*Aponogeton madagascariensis*). *BMC Plant Biol.* 21:375.
160. Filloramo, G. V., Blanche, E., Curtis, B. A., & **Archibald, J. M.** 2021. Re-examination of two diatom reference genomes using long-read sequencing. *BMC Genomics.* 22:379.
159. Blais, C. & **Archibald, J. M.** 2021. The past, present and future of the Tree of Life. *Curr Biol.* 31, R311-329.
158. Sibbald, S. J., Lawton, M. & **Archibald, J. M.** 2021. Mitochondrial genome evolution in pelagophyte algae. *Genome Biol. Evol.* 13(3) Doi: 10.1093/gbe/evab018
157. Gallot-Lavallée, L. & **Archibald, J. M.** 2020. Evolution: viral rhodopsins illuminate algal evolution. *Curr. Biol.* 30, R1469-1471.
156. **Archibald, J. M.** 2020. Quick Guide: Cryptomonads. *Curr. Biol.* 30, R1116-R1115.
155. Kim, J. I., Minseok, J., **Archibald, J. M.** & Shin, W. 2020. Comparative plastid genomics of non-photosynthetic chrysophytes: genome reduction and compaction. *Frontiers Plant Sci.* 11:572703. Doi: 10.3389/fpls.2020.572703.
154. de Vries, S., de Vries, J., **Archibald, J. M.**, & Slamovits, C. S. 2020. Comparative analyses of saprotrophy in *Salisapilia sapeloensis* and diverse plant pathogenic oomycetes reveal lifestyle-specific gene expression. *FEMS Microbiol. Ecol.* 96, fiae184.
153. Sibbald, S. J., Eme, L., **Archibald, J. M.** & Roger, A. J. 2020. Lateral gene transfer mechanisms and pan-genomes in eukaryotes. *Trends Parasitol.* 36, 927-941. (Invited review article).
152. de Vries, J., de Vries, S., Curtis, B.A., Zhou, H., Penny, S., Feussner, K., Pinto, D.M., Steinert, M., Cohen, A., von Schwartzenberg, K., & **Archibald, J. M.** 2020. Heat stress response in the closest algal relatives of land plants reveals conserved stress signalling circuits. *Plant J.* 103, 1025-1048. **AWARDED 'MOST OUTSTANDING PAPER' FOR 2020 BY TPJ.**
151. Sibbald, S. J. & **Archibald, J. M.** 2020. Genomic insights into plastid evolution. *Genome Biol. Evol.* 12 (7), 978-990. doi: 10.1093/gbe/evaa096. (Invited review article). **JOURNAL COVER**
150. Colp, M. & **Archibald, J. M.** 2020. The language of symbiosis: insights from protist biology. In: *Cellular dialogs in the holobiont*. Bosch, T. and Hadfield, M. (eds.). CRC Press. (Invited book chapter)
149. Tanifuji, G., Kamikawa, R., Moore, C. E., Mills, T., Onodera, N. T., Kashiya, Y., **Archibald, J. M.**, Inagaki, Y., & Hahimoto, T. 2020. Comparative plastid genomics of photosynthetic and non-



photosynthetic *Cryptomonas* species reveals loss of photosynthesis. *Genome Biol. Evol.* 12, 3926-3937: doi 10.1093/gbe/evaa001.

148. Gallot-Lavallée, L. & **Archibald, J. M.** 2020. Spotlight: Phagocytosis in a shape-shifting bacterium. *Trends Microbiol.* 28, 429-430.

147. Åsman, A., Curtis, B. A. & **Archibald, J. M.** 2019. Nucleomorph small RNAs in cryptophyte and chlorarachniophyte algae. *Genome Biol. Evol.* 11, 1117-1134.

146. Grisdale, C. J., Smith, D. R., and **Archibald, J. M.** 2019. Relative mutation rates in nucleomorph-bearing algae. *Genome Biol. Evol.* 11, 1045-1053.

145. Sibbald, S. J., Hopkins, J. F., Filloramo, G. V., & **Archibald, J. M.** 2019. Ubiquitin fusion proteins in complex algae: implications for the spread of eukaryotic photosynthesis. *BMC Genomics.* 20, 38.

144. Kim, J. I., Shin, H., Škaloud, P., Jung, J., Yoon, H.S., **Archibald, J. M.** & Shin, W. 2019. Comparative plastid genomics of Synurophyceae: inverted repeat dynamics and gene content variation. *BMC Evol. Biol.* 19, 20. doi: 10.1186/s12862-018-1316-9

143. Colp, M. J. & **Archibald, J. M.** 2019. Evolution: New protist predators under the sun. *Curr. Biol.* 29, R936-R938.

142. **Archibald, J. M.** 2019. Genomics reveals alga-associated cyanobacteria hiding in plain sight. *Proc. Natl. Acad. Sci. USA.* 116, 15757-15759.

141. Cenci, U., Sibbald, S. J., Curtis, B. A., Eme, L., Moog, D., Henrissat, B., Maréchal, E., Chabi, M., Djemiel, C., Roger, A. J., Kim, E., & **Archibald, J. M.** 2018. Nuclear genome sequence of the plastid-lacking cryptomonad *Goniomonas avonlea* provides insights into the evolution of secondary plastids. *BMC Biology.* 16, 137.

140. Lukeš, J., Jirsová, D., David, V., Wheeler, R. & **Archibald, J. M.** 2018. Massive mitochondrial DNA content in diplomonid and kinetoplastid protists. *IUBMB Life.* 70, 1267-1274.

139. Kim, J. I., Yoon, H. S., Gangman, Y., Shin, W., & **Archibald, J. M.** 2018. Comparative mitochondrial genomics of cryptophyte algae: gene shuffling and dynamic mobile genetic elements. *BMC Genomics.* 19, 275.

138. de Vries, J., Curtis, B. A., Gould, S. B. & **Archibald, J. M.** 2018. Embryophyte stress signaling evolved in the algal progenitors of land plants. *Proc. Natl. Acad. Sci. USA.* 115, E3471-3480. **JOURNAL COVER 82 CITATIONS**

137. de Vries, S., de Vries, J., von Dahlen, J. K., Gould, S. B. & **Archibald, J. M.** 2018. On plant defense signaling networks and early land plant evolution. *Commun. Integr. Biol.* 11: e1486168.

136. de Vries, J. & **Archibald, J. M.** 2018. Plastid evolution: autonomy versus nuclear control. In: *Advances in Botanical Research*, Volume 85 (Plastid Genome Evolution). Chaw, S.-M. & Jansen, R. (eds.). Pp. 1-28. (Invited book chapter).

135. Nowak, B. & **Archibald, J. M.** 2018. Opportunistic but lethal: the mystery of paramoebae. *Trends*



Parasitol. Invited review article. 34, 404-419.

134. de Vries, J. & **Archibald, J. M.** 2018. Plant evolution: landmarks on the path to terrestrial life. *New Phytol.* 217, 1428-1434. Commissioned insight.

133. **Archibald, J. M.** 2018. Evolution: scaling life's tree. *Nature.* 560, 26-27. (Invited book review)

132. de Vries, J. & **Archibald J. M.** 2018. Quick guide: plastid genomes *Curr. Biol.* 28, R336-R337.

131. Raina, J.-B., Eme, L., Pollock, F.J., Spang, A., **Archibald, J.M.**, & Williams, T.A. 2018. Symbiosis in the microbial world: from ecology to genome evolution. *Biol. Open.* 7, bio032524. doi:10.1242/bio.032524.

130. Cheng, S., Melkonian, M., Smith, S. A., Brockington, S., **Archibald, J. M.**, Delaux, P.-M., Li, F.-W., Melkonian, B., Mavrodiev, E. V., Sun, W., Fu, Y., Yang, H., Soltis, D. E., Graham, S. W., Soltis, P. S., Liu, Z., Xu, X., and Wong, G. K.-S. 2018. 10KP: a phylodiverse genome sequencing plan. *GigaScience.* 7, 1-9.

129. Tanifuji, G., Cenci, U., Moog, D., Dean, S., Nakayama, T., David, V., Fiala, I., Curtis, B. A., Sibbald, S.J., Onodera, N.T., Colp, M., Flegontov, P., Johnson-MacKinnon, J., McPhee, M., Inagaki, Y., Hashimoto, T., Kelly, S., Gull, K., Lukeš, J., and **Archibald, J. M.** 2017. Genome sequencing reveals metabolic and cellular interdependence in an amoeba-kinetoplastid symbiosis. *Scientific Rep.* 7, 11688. doi:10.1038/s41598-017-11866-x.

128. Eleni Gentekaki, Bruce A. Curtis, Courtney Stairs, Vladimír Klimeš, Marek Eliáš, Dayana Salas, Emily K. Herman, Laura Eme, Maria C. Arias, Bernard Henrissat, Frédérique Hilliou, Mary Klute, Hiroshi Suga, Shehre-Banoo Malik, Arthur W. Pightling, Martin Kolisko, Richard A. Rachubinski, Alexander Schlacht, Darren M. Soanes, Anastasios D. Tsaousis, **John M. Archibald**, Steven G. Ball, Joel B. Dacks, C. Graham Clark, Mark van der Giezen, Andrew J. Roger. 2017. Extreme genome diversity in the hyper-prevalent parasitic eukaryote *Blastocystis*. *PLoS Biol.* 15, e2003769.

127. Kim, J. I., Moore, C. E., **Archibald, J. M.**, Bhattacharya, D., Gangman, Y., Yoon, H. S., & Shin, W. 2017. Evolutionary dynamics of cryptophyte plastid genomes. *Genome Biol. Evol.* 9, 1859-1872.

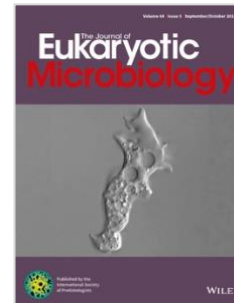
126. Kamikawa, R., Moog, D., Zauner, S., Tanifuji, G., Ishida, K.-I., Miyashita, H., Mayama, S, Hashimoto, T, Maier, U.-G., **Archibald, J. M.**, and Inagaki, Y. 2017. A non-photosynthetic diatom reveals early steps of reductive evolution in plastids. *Mol. Biol. Evol.* 34, 2355-2366.

125. Muñoz-Gómez, S. A., Mejía-Franco, F. G., Durnin, K., Colp, M., Grisdale, C. J., **Archibald, J. M.**, Slamovits, C. H. 2017. The new red algal subphylum Proteorhodophytina comprises the largest and most divergent plastid genomes known. *Curr. Biol.* 27, 1677-1684.

124. de Vries, J., de Vries, S., Slamovits, C. H., Rose, L. E., and **Archibald, J. M.** 2017. How embryophytic is the biosynthesis of phenylpropanoids and their derivatives in streptophyte algae? *Plant and Cell Physiol.* 58, 934-935. doi: 10.1093/pcp/pcx037.

123. de Vries, J., **Archibald, J. M.**, and Gould, S. B. 2017. The carboxy terminus of YCF1 contains a motif conserved throughout >500 million years of streptophyte evolution. *Genome Biol. Evol.* 9, 473-479. doi: 10.1093/gbe/evx013.

122. Sibbald, S., Cenci, U., Colp, M., Eglit, Y., O'Kelly, C.J., & **Archibald, J. M.** 2017. Diversity and evolution of *Paramoeba* sp. and their kinetoplastid endosymbionts. *J. Eukaryot. Microbiol.* 4: 598-607. **JOURNAL COVER**



121. Eme, L., Gentekaki, E., Curtis, B., **Archibald, J. M.**, and Roger, A. J. 2017. Lateral gene transfer in adaptation of the anaerobic parasite *Blastocystis* to the gut. *Curr. Biol.* 27, 807-820.

120. Simpson, A. G. B., Slamovits, C. H. & **Archibald, J. M.** 2017, Protist diversity and eukaryote phylogeny. In: *Handbook of the Protists (2nd edition of the Handbook of Protozoology by Margulis et al.)*. Archibald, J.M., Simpson, A.G.B, & Slamovits, C. (eds.). Springer. (Introductory chapter).

119. Hoef-Emden, K. & **Archibald, J. M.** 2017, Cryptophyta (Cryptomonads). In: *Handbook of the Protists (2nd edition of the Handbook of Protozoology by Margulis et al.)*. Archibald, J.M., Simpson, A.G.B, & Slamovits, C. (eds.). Springer. (Invited book chapter).

118. Grisdale, C., & **Archibald, J. M.** 2017. Secondary and tertiary endosymbiosis. In: *Reference Module in Life Sciences*. Elsevier Publishing. ISBN: 978-0-12-809633-8. (Invited textbook chapter).

117. **Archibald J. M.** 2017. Evolution: Protein import into a nascent photosynthetic organelle. *Curr. Biol.* 27, R1004-1006.

116. Sibbald, S. J. & **Archibald J. M.** 2017. More protist genomes needed. *Nature Ecol. Evol.* 1, 145. doi: 10.1038/s41559-017-0145.

115. de Vries, J. & **Archibald J. M.** 2017. Endosymbiosis: did plastids evolve from a freshwater cyanobacterium? *Curr. Biol.* 27, R103-105.

114. Cenci, U., Moog, D., Curtis, B. A., Tanifuji, G., Eme, L., Lukeš, J., and **Archibald, J. M.** 2016. Heme pathway evolution in kinetoplastid protists. *BMC Evol. Biol.* 16:109 (doi:10.1186/s12862-016-0664-6).

113. Tanifuji, G., **Archibald, J. M.**, and Hashimoto, T. 2016. Comparative genomics of mitochondria in chlorarachniophyte algae: endosymbiotic gene transfer and organellar genome dynamics. *Scientific Rep.* 6, 21016. doi:10.1038/srep21016.

112. Cenci, U., Moog, D, & **Archibald, J. M.** 2016. Origin and spread of plastids by endosymbiosis. In: *Algae symbioses*. Grube, M., Muggia, L. & Seckbach, J. (eds.). Springer-Verlag. (Invited book chapter).

111. Caron, D. A., Alexander, H., Allen, A. E., **Archibald, J. M.**, Armbrust, E. V., Bachy, C., Bharti, A., Bell, C. J., Dyhrman, S. T., Guida, S., Heidelberg, K. B., Kaye, J. Z., Metzner, J., Smith, S. R., & Worden, A. Z. 2016. Probing the evolution, ecology and physiology of marine protists using transcriptomics. *Nature Rev. Microbiol.* 15, 6-20.

110. de Vries, J., Stanton, A., **Archibald, J. M.**, & Gould, S. B. 2016. Streptophyte terrestrialization in light of plastid evolution. *Trends Plant Sci.* 21, 467-476. (Invited Opinion Article).

109. David, V. & **Archibald J. M.** 2016. Evolution: plumbing the depths of diplomonid diversity. *Curr. Biol.* R1290-1292.
108. Moog, D., Rensing, S. A., **Archibald, J. M.**, Maier, U.-G., and Ullrich, K. K. 2015. Localization and evolution of putative triose phosphate translocators in the diatom *Phaeodactylum tricornutum*. *Genome Biol. Evol.* 7, 2955-2969.
107. David, V., Flegontov, P., Gerasimov, E., Tanifuji, G., Hashimi, H., Logacheva, M.D., Maruyama, S., Onodera, N. T., Gray, M. W., **Archibald, J. M.**, and Lukeš, J. 2015. Gene loss and error-prone RNA editing in the mitochondrion of *Perkinsela*, an endosymbiotic kinetoplastid. *mBio.* 6, e01498-15.
106. Gile, G.H., Moog, D., Maier, U.-G., Slamovits, C., and **Archibald, J. M.** 2015. Dual organellar targeting of aminoacyl-tRNA synthetases in diatoms and cryptophytes. *Genome Biol. Evol.* 20, 1728-1742.
105. **Archibald, J. M.** 2015. Endosymbiosis and eukaryotic cell evolution. *Curr. Biol.* 25, R911-R921. (Invited Special Issue Review Article) **446 CITATIONS**
104. **Archibald, J. M.** 2015. Genomic perspectives on the birth and spread of plastids. *Proc. Natl. Acad. Sci. USA.* 112, 10147-10153. (Invited commentary as part of Sackler Colloquium) **108 CITATIONS**
103. **Archibald, J. M.** 2015. Evolution: Gene transfer in complex cells. *Nature.* 524, 423-424. (Invited News & Views)
102. Nakayama, T., Kamikawa, R., Tanifuji, G., Kashiya, Y., Ohkouchi, N., **Archibald J. M.**, and Inagaki, Y. 2014. Complete genome of a non-photosynthetic cyanobacterium in a diatom reveals recent adaptations to an intracellular lifestyle. *Proc. Natl. Acad. Sci. USA.* 111, 11407-11412.
101. McRose, D., Guo, J., Monier, A., Sudek, S., Wilken, S., Yan, S., Mock, T., **Archibald, J. M.**, Begley, T. P., Reyes-Prieto, A. & Worden A. Z. 2014. Alternatives to vitamin B₁ uptake revealed with discovery of riboswitches in multiple marine eukaryotic lineages. *ISME Journal.* 8, 2517-2529.
100. Hirakawa, Y., Suzuki, S., **Archibald, J. M.**, Keeling, P. J. & Ishida, K.-I. 2014. Overexpression of molecular chaperone genes in nucleomorph genomes. *Mol. Biol. Evol.* 31, 1437-1443.
99. Tanifuji, G., Onodera, N. T., Brown, M. W., Curtis, B. A., Roger, A. J., Wong, G. K.-S., Melkonian, M. & **Archibald, J. M.** 2014. Nucleomorph and plastid genome sequences of the chlorarachniophyte *Lotharella oceanica*: convergent reductive evolution and frequent recombination in nucleomorph-bearing algae. *BMC Genomics.* 15, 374.
98. Tanifuji, G., Onodera, N. T., Moore, C. E. & **Archibald, J. M.** 2014. Reduced nuclear genomes maintain high levels of gene transcription. *Mol. Biol. Evol.* 31, 625-635.
97. **Archibald, J. M.** 2014. The cellular revolution. *The Scientist* 12, 74 (invited contribution to 'Reading Frames' section)
96. Keeling, P. J., (75 other authors, including **Archibald, J. M.**), & Worden, A. Z. 2014. The Marine Microbial Eukaryote Transcriptome Sequencing Project (MMETSP): illuminating the functional diversity of eukaryotic life in the oceans through transcriptome sequencing. *PLoS Biol.* 12, e1001889. **773 CITATIONS**
95. Tanifuji, G. & **Archibald, J. M.** 2014. Nucleomorph comparative genomics. In: *Endosymbiosis*. Löffelhardt, W. (ed.). Springer Wein New York. Pp. 197-213. (Invited book chapter)

94. Eveleigh, R. J. M., Meehan, C.J., **Archibald, J. M.** & Beiko, R. G. 2013. Being *Aquifex aeolicus*: untangling a hyperthermophile's checkered past. *Genome Biol. Evol.* 5, 2478-2497.
93. Smith, D.R., Hua, J., **Archibald, J. M.** & Lee, R.W. 2013. Palindromic genes in the linear mitochondrial genome of the nonphotosynthetic green alga *Polytomella magna*. *Genome Biol. Evol.* 5, 1661-1667.
92. Maruyama, S., Eveleigh, R. J. M. & **Archibald, J. M.** 2013. TreeTrimmer: a method for phylogenetic dataset size reduction. *BMC Research Notes.* 6, 145.
91. Flegontov, P., Votypka, J., Skalicky, T., Logacheva, M. D., Penin, A. A., Tanifuji, G., Onodera, N. T., Kondrashov, A. S., **Archibald, J. M.** & Lukeš, J. 2013. *Paratrypanosoma* is a novel trypanosomatid. *Curr. Biol.* 23, 1787-1793.
90. Kim, E. & **Archibald, J. M.** 2013. Ultrastructure and molecular phylogeny of the cryptomonad *Goniomonas avonlea* sp. nov. *Protist.* 164, 160-182.
89. **Archibald, J. M.** 2013. The evolution of algae by secondary and tertiary endosymbiosis. In: *Advances in Botanical Research*. Piganeau, G. (ed.). Elsevier Press. Pp. 87-118. (Invited book chapter).
88. Hopkins, J. F., Eveleigh, R. J. M., Spencer, D. F., Laboissiere, S., Neilson, J. A. D., Durnford, D. G., Gray, M. W. & **Archibald J. M.** 2012. Proteomics reveals plastid- and periplastid-targeted proteins in the chlorarachniophyte alga *Bigelowiella natans*. *Genome Biol. Evol.* 4, 1391-1406.
87. Nakayama, T., Ishida, K.-I., & **Archibald J. M.** 2012. Broad distribution of TPI-GAPDH fusion proteins among eukaryotes: evidence for glycolysis in the mitochondrion? *PLoS One.* 7, e52340.
86. Curtis, B. A., Tanifuji, G., Burki, F., Gruber, A., Irimia, M., Maruyama, S., Arias, M. C., Ball, S. G., Gile, G. H., Hirakawa, Y., Hopkins, J. F., Kuo, A., Rensing, S. A., Schmutz, J., Symeonidi, A., Elias, M., Eveleigh, R. J. M., Herman, E. K., Klute, M. J., Nakayama, T., Oborník, M., Reyes-Prieto, A., Armbrust, V. E., Aves, S. J., Beiko, R. G., Coutinho, P., Dacks, J. B., Durnford, D. G., Fast, N. M., Green, B. R., Grisdale, C. J., Hempel, F., Henrissat, B., Höppner, M. P., Ishida, K.-I., Kim, E., Kořený, L., Kroth, P. G., Liu, Y., Malik, S.-B., Maier, U. G., McRose, D., Mock, T., Neilson, J. A. D., Onodera, N. T., Poole, A. M., Pritham, E. J., Richards, T. A., Rocap, G., Roy, S. W., Sarai, C., Schaack, S., Shirato, S., Slamovits, C. H., Spencer, D. F., Suzuki, S., Worden, A. Z., Zauner, S., Barry, K., Bell, C., Bharti, A. K., Crow, J. A., Grimwood, J., Kramer, R., Lindquist, E., Lucas, S., Salamov, A., McFadden, G. I., Lane, C. E., Keeling, P. J., Gray, M. W., Grigoriev, I. V., **Archibald, J. M.** 2012. Algal genomes reveal evolutionary mosaicism and the fate of nucleomorphs. *Nature.* 492, 59-65. **Subject of Nature News & Views and several other commentaries. 373 CITATIONS**
85. Moore, C., Curtis, B. A., Tanifuji, G. & **Archibald J. M.** 2012. Nucleomorph genome sequence of the cryptophyte alga *Chroomonas mesostigmatica* reveals lineage-specific gene loss and genome complexity. *Genome Biol. Evol.* 4, 1162-1175.
84. Onodera, N., Ryu, J., Durbic, T., Nislow, C., **Archibald, J. M.**, & Rohde, J. R. 2012. Genome sequence of *Shigella flexneri* serotype 5a strain M90T Sm. *J. Bacteriol.* 194, 3022.
83. Maruyama, S. & **Archibald, J. M.** 2012. Endosymbiosis, gene transfer, and algal cell evolution. In: *Advances in algal cell biology*. Heimann, K. and Katsaros, C. (eds.). Walter de Gruyter. Pp. 21-41. (Invited book chapter)
82. Nakayama, T. & **Archibald, J. M.** 2012. Evolving a photosynthetic organelle. *BMC Biol.* 10, 35. (Invited review article)

81. Gray, M. W. & **Archibald, J. M.** 2012. Origins of mitochondria and plastids. In: *Advances in photosynthesis and respiration (Genomics of chloroplasts and mitochondria)*. Bock, R. & Knoop, V. (eds.). Springer. Pp. 1-30. (Invited book chapter)

80. **Archibald, J. M.** 2012. Plastid origins. In: *Organelle genetics: evolution of organelle genomes and gene expression*. Bullerwell, C. (ed.). Springer-Verlag. Pp. 19-38. (Invited book chapter)

79. **Archibald, J. M.** 2012. Lynn Margulis (1938-2011). *Curr. Biol.* 22, R4-6. (invited Obituary)

78. Tanifuji, G., Kim, E., Onodera, N. T., Gibeault, R., Dlutek, M., Cawthorn, R. J., Fiala, I., Lukeš, J., Greenwood, S. J., & **Archibald, J. M.** 2011. Genomic characterization of *Neoparamoeba pemaquidensis* (Amoebozoa) and its *Ichthyobodo*-related endosymbiont (Euglenozoa). *Eukaryot. Cell.* 10, 1143-1146.

77. Maruyama, S., Suzaki, T., Weber, A. P. M., **Archibald, J. M.**, & Nozaki, H. 2011. Ancient gene transfer from algae harboring red algal-derived secondary plastids to euglenids. *BMC Evol. Biol.* 11, 105.

76. Kim, E., Harrison, J., Sudek, S., Jones, M. D. M., Wilcox, H. M., Richards, T. A., Worden, A. Z., & **Archibald, J. M.** 2011. Newly identified and diverse plastid-bearing branch on the eukaryotic tree of life. *Proc. Natl. Acad. Sci. USA.* 108, 1496-1500.

FACULTY OF 1000 BIOLOGY SELECTION Top 50 most-read articles at PNAS for January 2011. 94 CITATIONS

75. Tanifuji, G., Onodera, N. T., Wheeler, T. J., Dlutek, M., Donaher, N. & **Archibald, J. M.** 2011. Complete nucleomorph genome sequence of the non-photosynthetic alga *Cryptomonas paramecium* reveals a core nucleomorph gene set. *Genome Biol. Evol.* 3, 44-54.

74. **Archibald, J. M.** 2011. Origin of eukaryotic cells: 40 years on. *Symbiosis.* 54, 69-86. (Invited commemorative review)

73. McInerney, J. O., Martin, W. F., Koonin, E. V., Allen, J. F., Galperin, M. Y., Lane, N., **Archibald, J. M.**, & Embley, T. M. 2011. Planctomycetes and eukaryotes: a case of analogy not homology. *BioEssays.* 33, 810-817.

72. Lukeš, J., **Archibald, J. M.**, Keeling, P. J., Gray, M. W. & Doolittle, W. F. 2011 How a neutral evolutionary ratchet can build cellular complexity. *IUBMB Life.* 63, 528-537.

71. Doolittle, W. F., Lukeš, J., **Archibald, J. M.**, Keeling, P. J. & Gray, M. W. 2011. Comment on "Does constructive neutral evolution play an important role in the origin of cellular complexity?" *BioEssays.* 33, 427-429.

70. Richards, T. A. & **Archibald J. M.** 2011. Cell evolution: gene transfer agents and the origin of mitochondria. *Curr. Biol.* 21, R112-114.

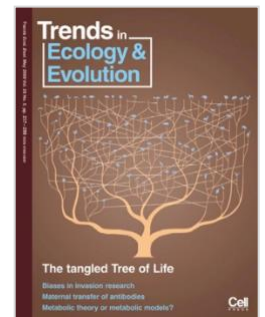
69. Curtis, B. A. & **Archibald, J. M.** 2010. A spliceosomal intron of mitochondrial DNA origin. *Curr. Biol.* 20, R919-920.

68. Tanifuji, G. & **Archibald, J. M.** 2010. Actin gene family dynamics in cryptomonads and red algae. *J. Mol. Evol.* 71, 169-179.

67. Silver, T. D., Moore, C. E. & **Archibald, J. M.** 2010. Nucleomorph ribosomal DNA and telomere dynamics in chlorarachniophyte algae. *J. Euk. Microbiol.* 57, 453-459.

66. Kim, E., Park, J. S., Simpson, A. G. B., Matsunaga, S., Watanabe, M., Murakami, A., Sommerfeld, K., Onodera, N. T., & **Archibald, J. M.** 2010. **Complex array of endobionts in *Petalomonas sphagnophila*, a large heterotrophic euglenid protist from *Sphagnum*-dominated peatlands.** *ISME Journal*. 4, 1108-1120.
65. Hopkins, J. & **Archibald, J. M.** 2010. Plastid evolution and the nuclear genomic 'footprint' of red and green algal endosymbionts. In: *Red algae in the genomics age*. Seckbach, J. & Grube, M. (eds.). Springer-Verlag. (Invited book chapter). Pp. 191-204.
64. Curtis, B. A. & **Archibald, J. M.** 2010. Problems and progress in understanding the origins of mitochondria and plastids. In: *Symbioses and Stress*. Seckbach, J. & Grube, M. (eds.). Springer-Verlag. (Invited book chapter). Pp. 41-62.
63. Gray, M. W., Lukeš, J., **Archibald, J. M.**, Keeling, P. J., & Doolittle, W. F. 2010. Cell biology. Irremediable complexity? *Science*. 330, 920-921. **225 CITATIONS**
62. **Archibald, J. M.** & Richards, T. A. 2010. Gene transfer: anything goes in plant mitochondria. *BMC Biology*. 8:147.
61. Kim, E. & **Archibald, J. M.** 2010. Plastid evolution: gene transfer and the maintenance of 'stolen' organelles. *BMC Biology*. 8, 73.
60. Donaher, N., Tanifuji, G., Onodera, N. T., Malfatti, S. A., Chain, P. S. G., Hara, Y., & **Archibald, J. M.** 2009. **The complete plastid genome sequence of the secondarily non-photosynthetic alga *Cryptomonas paramecium*: reduction, compaction, and accelerated evolutionary rate.** *Genome Biol. Evol.* 2009, 439-448. doi: 10.1093/gbe/evp047.
59. Burki, F., Inagaki, Y., Brate, J., **Archibald, J. M.**, Keeling, P. J., Cavalier-Smith, T., Sakaguchi, M., Hashimoto, T., Horak, A., Kumar, S., Klaveness, D., Jakobsen, K. S., Pawlowski, J., and Shalchian-Tabrizi, K. 2009. Large-scale phylogenomic analyses reveal that two enigmatic protist lineages, Telonemia and Centroheliozoa, are related to photosynthetic chromalveolates. *Genome Biol. Evol.* 2009, 231-238. **doi:10.1093/gbe/evp022 167 CITATIONS**
58. Ota, S., Silver, T. D., **Archibald, J. M.**, & Ishida, K.-I. 2009. *Lotharella oceanica* sp. nov.—a new planktonic chlorarachniophyte studied by light and electron microscopy. *Phycologia* 48, 315-323.
57. Elias, M. & **Archibald, J. M.** 2009. The RfL family of small GTPases is an ancient eukaryotic invention probably functionally associated with the flagellar apparatus. *Gene*. 442, 63-72.
56. Elias, M. & **Archibald, J. M.** 2009. Sizing up the footprint of endosymbiosis. *BioEssays*. 31, 1273-1279. (Invited review article)
55. Moore, C. & **Archibald, J. M.** 2009. Nucleomorph genomes. *Annu. Rev. Genet.* 43: 251-264. (Invited peer-reviewed contribution)
54. Lane, C. E. & **Archibald, J. M.** 2009. Going, going, not quite gone: nucleomorphs as a case study in nuclear genome reduction. *J. Heredity*. 100, 582-582-590. (Invited review article)
53. Kim, E. & **Archibald, J. M.** 2009. **Diversity and evolution of plastids and their genomes.** In: *The chloroplast—interactions with the environment*. Aronsson, H. & Sandelius, A. S. (eds.). Springer-Verlag, Berlin. Pp. 1-39.

52. **Archibald, J. M.** 2009. The origin and spread of eukaryotic photosynthesis—evolving views in light of genomics. *Botanica Marina*. 52, 95-103. (Invited review)
51. **Archibald, J. M.** 2009. Secondary endosymbiosis. In: *Encyclopedia of Microbiology*. Schaechter, M. (ed.). Oxford: Elsevier. Pp. 438-446. (Invited textbook chapter)
50. Lane, C. E. & **Archibald, J. M.** 2009. Reply to Bodyl, Stiller and Mackiewicz: "Chromalveolate plastids: direct descent or multiple endosymbioses?" *Trends Ecol. Evol.* 24, 121-122.
49. **Archibald, J. M.** 2009. The puzzle of plastid evolution. *Curr. Biol.* 19, R81-R88. (Invited full-length review) **505 CITATIONS**
48. **Archibald, J. M.** 2009. Genomics: Green evolution, green revolution. *Science*. 324, 191-192. (Invited Commentary)
47. Khan, H. & **Archibald, J. M.** 2008. Lateral transfer of introns in the cryptophyte plastid genome. *Nucleic Acids Res.* 36, 3043-3053.
46. Kim, E., Lane, C. E., Curtis, B. A., Kozera, C., Bowman, S., & **Archibald, J. M.** 2008. Complete sequence and analysis of the mitochondrial genome of *Hemiselmis andersenii* CCMP644 (Cryptophyceae). *BMC Genomics*. 9, 215.
45. Cuvelier, M. L., Ortiz, A., Kim, E., Moehlig, H., Richardson, D., Heidelberg, J. F., **Archibald, J. M.** & Worden, A. 2008. Widespread distribution of a unique protistan lineage. *Env. Microbiol.* 10, 1621-1634.
44. Lane, C. E. & **Archibald, J. M.** 2008. New members of the genus *Hemiselmis* (Cryptomonadales, Cryptophyceae). *J. Phycol.* 44, 339-450.
43. Phipps, K., Lane, C. E., Donaher, N. & **Archibald, J. M.** 2008. Nucleomorph genome karyotype diversity in the cryptophyte genus *Cryptomonas*. *J. Phycol.* 44, 11-14
42. Fong, M. & **Archibald, J. M.** 2008. Evolutionary dynamics of light-independent protochlorophyllide oxidoreductase (LIPOR) genes in the secondary plastids of cryptophyte algae. *Eukaryot. Cell.* 7, 550-553.
41. Lane, C. E. & **Archibald, J. M.** 2008. The eukaryotic Tree of Life: endosymbiosis takes its TOL. *Trends Ecol. Evol.* 23, 268-275. (Invited opinion piece). **COVER ARTICLE, 211 CITATIONS**
40. **Archibald, J. M.** 2008. The eocyte hypothesis and the origin of eukaryotic cells. *Proc. Natl. Acad. Sci. USA*. 51, 20049-20050. (Invited Commentary)
39. Hoef-Emden, K. & **Archibald, J. M.** 2008. *Cryptophytes*. TREE OF LIFE web project. <<http://tolweb.org/Cryptophytes/>> (Invited web contribution)
38. **Archibald, J. M.** 2008 Genome evolution: remnant algal genes in ciliates. *Curr. Biol.* 18, R663-R665. (Invited Commentary)
37. Keeling, P. J. & **Archibald, J. M.** 2008. Organelle evolution: What's in a name? *Curr. Biol.* 18, R345-R347. (Invited Commentary)
36. T. D., Koike, S., Yabuki, A., Kofuji, R., **Archibald, J. M.**, & Ishida, K.-I. 2007. Phylogeny and nucleomorph karyotype diversity of chlorarachniophyte algae. *J. Euk. Microbiol.* 54, 403-410.



35. Khan, H., Kozera, C., Curtis, B. A., Tarrant Bussey, J., Theophilou, S., Bowman, S., & **Archibald, J. M.** 2007. Retrotransposons and tandem repeat sequences in the nuclear genomes of cryptomonad algae. *J.Mol. Evol.* 64(2), 223-236.
34. Khan, H., Parks, N., Kozera, C., Curtis, B. A., Parsons, B., Bowman, S., & **Archibald, J. M.** 2007. Plastid genome sequence of the cryptophyte alga *Rhodomonas salina* CCMP1319: lateral transfer of putative DNA replication machinery and a test of chromist plastid phylogeny. *Mol. Biol. Evol.* 24, 1832-1842.
33. Lane, C. E., van den Heuvel, K., Kozera, C., Curtis, B. A., Parsons, B., Bowman, S., & **Archibald, J. M.** 2007. Nucleomorph genome of *Hemiselmis andersenii* reveals complete intron loss and compaction as a driver of protein structure and function. *Proc. Natl. Acad. Sci. USA.* 104, 19908-19913.. **FACULTY OF 1000 BIOLOGY SELECTION. 170 CITATIONS**
32. Adl, S. M., Leander, B. S., Simpson, A. G. B., **Archibald, J. M.** and 16 other authors. 2007. Diversity, nomenclature, and taxonomy of protists. *Systematic Biol.* 56, 684-689. **304 CITATIONS**
31. Bhattacharya, D., **Archibald, J. M.**, Weber, A. P. M., & Reyes-Prieto, A. 2007. How do endosymbionts become organelles? Understanding early events in plastid evolution. *BioEssays*, 29, 1239-1246 **153 CITATIONS**
30. **Archibald, J. M.** 2007. Nucleomorph genomes: structure, function, origin and evolution. *BioEssays*, 4, 392-402.
29. **Archibald, J. M.** 2007. Review of *Genomics and evolution of microbial eukaryotes* (Katz and Bhattacharya eds.) *Q. Rev. Biol.* 82, 275-276. (Invited book review)
28. Ruiz-Trillo, I., Lane, C. E., **Archibald, J. M.** & Roger, A. J. 2006. Insights into the evolutionary origin and genome architecture of the unicellular opisthokonts *Capsaspora owczarzaki* and *Sphaeroforma arctica*. *J. Eukaryot. Microbiol.* 53(5) 379-384.
27. Lane, C. E., Khan, H., MacKinnon, M., Fong, A., Theophilou, S. & **Archibald, J. M.** 2006. Insight into the diversity and evolution of the cryptomonad nucleomorph genome. *Mol. Biol. Evol.* 23, 856-865.
26. Lane, C. E. & **Archibald, J. M.** 2006. Novel nucleomorph genome architecture in the cryptomonad genus *Hemiselmis*. *J. Eukaryot. Microbiol.* 53, 515-521.
25. **Archibald, J. M.** 2006. Genome complexity in a lean, mean photosynthetic machine. *Proc. Natl. Acad. Sci. USA*, 103, 11433-11434. (Invited Commentary)
24. **Archibald, J. M.** 2006. Algal genomics: exploring the imprint of endosymbiosis. *Curr. Biol.*, 16, R1033-1035. (Invited Commentary)
23. Bhattacharya, D. & **Archibald, J. M.** 2006. Response to Theissen and Martin: "The difference between endosymbionts and organelles". *Curr. Biol.*, 16, R1017-R1018.
22. **Archibald, J. M.** 2006. Endosymbiosis: double-take on plastid origins. *Curr. Biol.*, 16, R690-R692. (Invited Commentary)
21. Patron, N. J., Waller, R. F., **Archibald, J. M.**, & Keeling, P. J. 2005. Complex protein targeting to dinoflagellate plastids. *J. Mol. Biol.*, 348, 1015-1024. **167 CITATIONS**

20. Kim, J. C., Ou, Y. Y., Badano, J. L., Esmail, M. A., Leitch, C. C., Fiedrich, E., Beales, P. L., **Archibald, J. M.**, Katsanis, N., Rattner, J. B., & Leroux, M. R. 2005. MKKS/BBS6, a divergent chaperonin-like protein linked to the obesity disorder Bardet-Biedl syndrome, is a novel centrosomal component required for cytokinesis. *J. Cell Sci.*, 118, 1007-1020. **191 CITATIONS**

19. **Archibald, J. M.** 2005. Jumping genes and shrinking genomes—probing the evolution of eukaryotic photosynthesis using genomics. *IUBMB Life*, 57, 539-547. (Invited review) **COVER ARTICLE**

18. **Archibald, J. M.** & Keeling, P. J. 2005. On the origin and evolution of plastids. In: *Microbial Evolution: Concepts and Controversies*. Sapp, J. (ed.). Oxford University Press, Oxford. Pp. 238-260. (Invited book chapter)

17. Rogers, M. B., **Archibald, J. M.**, Field, M. A., Li, C., Striepen, B. & Keeling, P. J. 2004. Plastid-targeting peptides from the chlorarachniophyte *Bigelowiella natans*. *J. Eukaryot. Microbiol.*, 51, 529-535.

16. **Archibald, J. M.** & Keeling, P. J. 2004. Actin and ubiquitin protein sequences support a cercozoan / foraminiferan ancestry for the plasmodiophorid plant pathogens. *J. Eukaryot. Microbiol.*, 1, 113-118.

15. **Archibald, J. M.** & Keeling, P. J. 2004. The evolutionary history of plastids: a molecular phylogenetic perspective. In: *Organelles, Genomes and Eukaryote Phylogeny: An Evolutionary Synthesis in the Age of Genomics*. Hirt, R. P. & Horner, D. (eds.). Taylor & Francis Books, London. Pp. 55-74. (Invited book chapter)

14. Keeling, P. J., **Archibald, J. M.**, Fast, N. M., & Palmer, J. D. 2004. Comment on "The Evolution of Modern Eukaryotic Phytoplankton". *Science*, 306, 2191.

13. **Archibald, J. M.**, Rogers, M., Toop, M., Ishida, K. & Keeling, P. J. 2003. Lateral gene transfer and the evolution of plastid-targeted proteins in the secondary plastid-containing alga *Bigelowiella natans*. *Proc. Natl. Acad. Sci. USA* 100, 7678-7683. **287 CITATIONS, 2 COMMENTARIES**

12. **Archibald, J. M.**, Teh, E. M. & Keeling, P. J. 2003. Novel ubiquitin fusion proteins: ribosomal protein P1 and actin. *J. Mol. Biol.* 328, 771-778.

11. **Archibald, J. M.**, Longet, D., Pawlowski, J. & Keeling, P. J. 2003. A novel polyubiquitin structure in Cercozoa and Foraminifera: evidence for a new eukaryotic supergroup. *Mol. Biol. Evol.* 20, 62-66.

10. Longet, D., **Archibald, J. M.**, Keeling, P. J., & Pawlowski, J. 2003. Foraminifera and Cercozoa share a common origin according to RNA polymerase II phylogenies. *Int. J. Syst. Evol. Microbiol.* 53, 1735-1739.

9. **Archibald, J. M.** & Keeling, P. J. 2003. Plant genomes: cyanobacterial genes revealed. *Heredity* 90, 2-3. (Invited Commentary)

8. **Archibald, J. M.** & Roger, A. J. 2002. Gene conversion and the evolution of euryarchaeal chaperonins: a maximum likelihood-based method for detecting conflicting phylogenetic signal. *J. Mol. Evol.* 55, 232-245.

7. **Archibald, J. M.** & Roger, A. J. 2002. Gene duplication and gene conversion shape the evolution of archaeal chaperonins. *J. Mol. Biol.* 316, 1041-1050.

6. **Archibald, J. M.**, O'Kelly, C. J. & Doolittle, W. F. 2002. The chaperonin genes of jakobid and jakobid-like flagellates: implications for eukaryotic evolution. *Mol. Biol. Evol.* 19, 422-431.

5. **Archibald, J. M.**, & Keeling, P. J. 2002. Recycled plastids: a green movement in eukaryotic evolution. *Trends. Genet.* 18, 577-584. (Invited review) **273 CITATIONS**



4. **Archibald, J. M.**, Blouin, C. & Doolittle, W. F. 2001. Gene duplication and the evolution of group II chaperonins: implications for structure and function. *J. Struct. Biol.* 135, 157-169.
3. **Archibald, J. M.**, Cavalier-Smith, T., Maier, U.-G. & Douglas, S. 2001. Molecular chaperones encoded by a reduced eukaryotic nucleus: the cryptomonad nucleomorph. *J. Mol. Evol.* 52: 490-501.
2. **Archibald, J. M.**, Logsdon, J. M. Jr. & Doolittle, W. F. 2000. Origin and evolution of eukaryotic chaperonins: phylogenetic evidence for ancient duplications in CCT genes. *Mol. Biol. Evol.* 17, 1456-1466.
1. **Archibald, J. M.**, Logsdon, J. M. Jr. & Doolittle, W. F. 1999. Recurrent paralogy in the evolution of archaeal chaperonins. *Curr. Biol.* 9, 1053-1056. **111 CITATIONS**

Edited works:

Handbook of the Protists (2nd edition of the Handbook of Protoctista by Margulis et al.). 2017. **Archibald, J. M.**, Simpson, A.G.B. & Slamovits, C. (Eds.). Springer. (Invited editorship).

Books:

Archibald, J. M. 2018. Genomics: a very short introduction. *Oxford University Press (VSI Series)*. 160 pp. ISBN: 978-0-19-878620-7.

Archibald, J. M. 2016. One plus one equals one: symbiosis and the evolution of complex life. *Oxford University Press*. 224 pp. ISBN: 978-0-19-966059-9. (*Paperback with new Afterward*)

Archibald, J. M. 2014. One plus one equals one: symbiosis and the evolution of complex life. *Oxford University Press*. 224 pp. ISBN: 978-0-19-875812-9. **111 CITATIONS**

Reviewed in *Nature* (Moran N.A. 2014 Nature 510, 338-339), *Current Biology* (Saffo, M.B. 2015 Curr. Biol. 25, R100-R102), *Biology & Philosophy* (O'Malley, M. 2015 Biol. Phil.), *BioScience* (van der Giezen, M. 2015 BioScience doi:10.1093/biosci/biv096), and *Reports of the National Center for Science Education* (Spath, S. 2015. RNCSE 35.3, 9.1)