

JOHN M. ARCHIBALD

Curriculum vitae September 2018

Department of Biochemistry & Molecular Biology
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ACADEMIC POSITIONS

Director

Centre for Comparative Genomics & Evolutionary Bioinformatics, October 2017- present

University Research Professor

Dalhousie University, July 2016-June 2021

Visiting By-Fellow

Churchill College, University of Cambridge, UK
(July – December 2012)

Professor

Department of Biochemistry & Molecular Biology,
Dalhousie University (07/2012-present)

Associate Professor

Department of Biochemistry & Molecular Biology,
Dalhousie University (07/2008-06/2012)

Assistant Professor

Department of Biochemistry & Molecular Biology,
Dalhousie University (09/2003-06/2008)

Graduate Coordinator

Department of Biochemistry & Molecular Biology,
Dalhousie University (2010-2015)

Associate Graduate Coordinator

Department of Biochemistry & Molecular Biology,
Dalhousie University (2006-2010)

Editorial Board Member

Environmental Microbiology (2014-present)

Eukaryotic Cell (2013-present)

Current Biology (2012-present)

Protist Genomics (2012-present)

BMC Biology (2009-present)

Genome Biology & Evolution (2010-present)

Molecular Phylogenetics & Evolution (2010-2011)

Journal of Phycology (2009-2010)

Phycological Research (2007-2010)

Associate Editor

Associate Editor

Associate Editor

Associate Editor

RESEARCH AREAS

Eukaryotic Biodiversity, Comparative Genomics,
Molecular Evolution

EDUCATION

Killam Postdoctoral fellow, Department of Botany
University of British Columbia, Vancouver, 2001-2003

Ph.D. in Biochemistry & Molecular Biology
Dalhousie University, Halifax, Nova Scotia, May 2001

B.Sc. (with 1st class Honours) in Biology
Dalhousie University Halifax, Nova Scotia, April 1997

PERSONAL

Birth Date: 29 August 1971. Canadian Citizen.

SCHOLARSHIPS, FELLOWSHIPS, AWARDS AND DISTINCTIONS

- 2016-2021 **Elected Member**, College of New Scholars, Artists and Scientists of the Royal Society of Canada
- 2016-2021 **Distinguished University Research Professorship**, Dalhousie U. (\$1,000 annually)
- 2015-2016 **Vice President**, International Society of Protistologists
- 2015 **Elected Fellow**, American Academy of Microbiology (American Society for Microbiology)
- 2014 **Seymour H. Hutner Young Investigator Prize** (\$1,000), International Society of Protistologists (“Awarded annually to an outstanding scientist in the field of protozoology who is recognized on an international level”)
- 2012 **Visiting By-Fellow**, Churchill College, University of Cambridge (July-December 2012)
- 2012-2017 **Senior Fellow**, Canadian Institute for Advanced Research (Integrated Microbial Biodiversity)
- 2007-2011 **Fellow**, Canadian Institute for Advanced Research (Integrated Microbial Biodiversity)
- 2008 **Award of Excellence in Basic Research** (\$7,000 CDN), Dalhousie Medical Research Foundation, Dalhousie University
- 2008-2013 **New Investigator Award**, Canadian Institutes of Health Research (5-yr salary award)
- 2004 **New Investigator Award** (\$50,000 CDN), Dalhousie Medical Research Foundation
- 2003-2007 **Scholar**, Canadian Institute for Advanced Research, Program in Evolutionary Biology
- 2003-2006 **Investigator**, Genome Canada / Genome Atlantic (external salary support 2003-06)
- 2001-2003 **Killam Postdoctoral Fellow**, University of British Columbia

RESEARCH GRANTS AND SUPPORT (Applied for)

- 2018- **NSERC CREATE Grant**—“*Training Program in Genome Informatics*” (Letter of Intent approved for full submission June 2018). \$1.6 million CDN over 6 years.
PI—J. M. ARCHIBALD plus 10 co-applicants and 10 collaborators

RESEARCH GRANTS AND SUPPORT (Current)

- 2017-2019 **Gordon and Betty Moore Foundation**—“*Laboratory systems for studying gene transfer in eukaryotes*” \$368,375 CDN over 2.5 years
PI—J. M. ARCHIBALD
- 2014-2019 **NSERC Discovery Grant**—“*Endosymbiosis and genome evolution in eukaryotic microbes*” \$85,000 / year for 5 years
PI—J. M. ARCHIBALD

RESEARCH GRANTS AND SUPPORT (Previous)

- 2012-2017 **Canadian Institute for Advanced Research**—“*Integrated Microbial Biodiversity Program*” ~\$24,000 / year for 5 years
PI—J. M. ARCHIBALD
- 2011-2016 **CIHR Operating Grant**—“*Endosymbiosis, parasitism, and genome evolution*” ~\$115,000 / year for 5 years
PI—J. M. ARCHIBALD
- 2007-2016 **Tula Foundation / Dalhousie Centre for Comparative Genomics & Evolutionary Bioinformatics (CGEB)**—equivalent of one postdoctoral fellow salary (\$44,000/year) for 5 years plus research allowance (\$20,000/year)
Co-applicant with A. J. Roger, PI
- 2013 **NSERC Equipment Grant – Research Tools and Instruments**—“*An in-house high-throughput DNA sequencing instrument*”: \$147,455

Co-applicant with C. Slamovits (PI), A. J. Roger and A. G. B. Simpson

- 2011 **CIHR & NS/CIHR Regional Partnership Program Operating Grant** —“*Endosymbiosis, parasitism, and genome evolution*”: \$37,824 over 3 months
PI—J. M. ARCHIBALD
- 2009-2014 **NSERC Discovery Grant** (#283335-09)—“*Genome and proteome evolution in nucleomorph-containing algae*”: \$34,000/year for 5 years
PI—J. M. ARCHIBALD
- 2008-2011 **CIHR & NS/CIHR Regional Partnership Program Operating Grant**—“*The causes and consequences of genome reduction in eukaryotes*”: \$100,000 year 1, \$76,615 years 2/3
PI—J. M. ARCHIBALD
- 2008-2010 **NSERC Special Research Opportunities Program Grant**—“*Impact of secondary endosymbiosis on eukaryotic genome evolution*”: \$113,050 year 1, \$106,050 year 2
PI—J. M. ARCHIBALD, Co-applicant M. Gray
- 2007-2008 **CIHR Operating Grant** (MOP-8156)—“*The causes and consequences of genome reduction in eukaryotes*”: \$100,000 for 1 year
PI—J. M. ARCHIBALD
- 2007-2012 **Canadian Institute for Advanced Research, Program in Integrated Microbial Biodiversity**—annual funds in support of research: \$25,000/year for 5 years
PI—J. M. ARCHIBALD (CIFAR Scholar (2007/8) and Fellow (2009-12))
- 2007 **NSERC Equipment Grant – Research Tools and Instruments**—“*An Xserve computer cluster for phylogenetic and comparative genomic analyses*”: \$55,591
Co-applicant with A. J. Roger, PI
- 2006-2010 **US Department of Energy’s Joint Genome Institute (JGI) Community Sequencing Program (CSP_LOI_19044)**—“*Impact of Secondary Endosymbiosis on Genome Evolution and Cell Biology: A Cryptomonad and a Chlorarachniophyte Nuclear Genome*”: In kind contribution ~980,000 USD
PI—J. M. ARCHIBALD
- 2006-2007 **Canada Foundation for Innovation (CFI) Institutional Infrastructure Operating Fund (IOF)**—“*Laboratory for microbial genome analysis*”: \$37,442
PI—J. M. ARCHIBALD
- 2006-2007 **CIHR Operating Grant** (IG-81648)—“*The causes and consequences of genome reduction in eukaryotes*”: \$100,000 for 1 year
PI—J. M. ARCHIBALD
- 2004-2008 **NSERC Discovery Grant** (#283335-04)—“*Genome reduction in eukaryotes*”: \$36,390/year for 5 years
PI—J. M. ARCHIBALD
- 2003-2006 **Genome Atlantic – Genome Canada Large-Scale Project**—“*A comprehensive understanding of prokaryotic genome evolution and diversity: from genomics to metagenomics*”: ~\$10,500,000 over 4 years
PI—W. F. Doolittle and 5 others
- 2003-2004 **CFI New Opportunities Fund**—“*Laboratory for microbial genome analysis*”: \$312,020
PI—J. M. ARCHIBALD

PUBLICATIONS Google Scholar statistics: 120 publications, ~6,300 career citations (~3,500 since 2013), **h-index=41**; articles with >75 citations are highlighted; trainees underlined.

Primary research articles in refereed publications:

Moog, D., David, V., Kelly, S., Sibbald, S. & **Archibald, J. M.** Comparative genomics of *Perkinsela* sp. endosymbionts of parasitic amoebae. In preparation. *Role: senior author and supervisor.*

Sibbald, S. J., Hopkins, J. F., Filloramo, G. V., & **Archibald, J. M.** Ubiquitin fusion proteins in complex algae: implications for the spread of eukaryotic photosynthesis. *BMC Genomics*. Under review. *Role: Senior author and supervisor.*

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., and **Archibald, J. M.** Nuclear genome sequence of the plastid-lacking cryptomonad *Goniomonas avonlea*: phylogenomic and metabolic insights into the evolution of secondary plastids. *BMC Biology*. Under review. *Role: senior author and supervisor.*

Grisdale, C. J., Smith, D. R., and **Archibald, J. M.** Relative mutation rates in nucleomorph-bearing algae. *Genome Biol. Evol.* Under revision. *Role: Senior author and supervisor.*

Lukeš, J., Jirsová, D., David, V., Wheeler, R. & **Archibald, J. M.** 2018. Massive mitochondrial DNA content in diplomonid and kinetoplastid protists. In Press. IUBMB Life. *Role: Co-senior author and supervisor.*

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. *Role: Co-senior author and supervisor.*

de Vries, J., Curtis, B. A., Gould, S. B. & **Archibald, J. M.** 2018. Stress-associated plastid-nucleus signaling evolved in the algal progenitors of land plants. *Proc. Natl. Acad. Sci. USA*. 115, E3471-3480. *Role: Senior author and supervisor. JOURNAL COVER*

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. *Role: Project coordinator, supervisor, and senior author.*

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. *Role-co-supervisor.*

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. *Role: Supervisor.*

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. *Role: Supervisor.*

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. *Role: Supervisor.*

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. *Role: Senior author and supervisor.*

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. *Role: Supervisor.*

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. *Role: senior author. JOURNAL COVER*

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. *Role: Supervisor.*

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. *Role: Senior author.*

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. *Role: Co-senior author.*

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. *Role: author.*

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. *Role: Co-senior author.*

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. *Role: Senior-author.*

Nakayama, T., Kamikawa, R., Tanifuji, G., Kashiwama, 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. *Role: Co-senior author.*

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. *Role: Co-author.*

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. *Role: Co-author.*

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. *Role: Senior author.*

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. *Role: Senior author.*

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. *Role: Co-senior author.*

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. *Role: Co-senior author.*

Maruyama, S., Eveleigh, R. J. M. & Archibald, J. M. 2013. TreeTrimmer: a method for phylogenetic dataset size reduction. *BMC Research Notes.* 6, 145. *Role: Senior author.*

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. *Role: Co-senior author.*

Kim, E. & Archibald, J. M. 2013. Ultrastructure and molecular phylogeny of the cryptomonad *Goniomonas avonlea* sp. nov. *Protist.* 164, 160-182. *Role: Senior author.*

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 *Bigeloviella natans*. *Genome Biol. Evol.* 4, 1391-1406. *Role: Senior author.*

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. *Role: Senior author.*

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. *Role: PI, supervisor, project coordinator and senior author. Subject of Nature NEWS & VIEWS and several other commentaries* **248 CITATIONS**

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. *Role: Senior author.*

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. *Role: Co-Senior author.*

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. *Role: Senior author.*

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. *Role: Co-senior author.*

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

FACULTY OF 1000 BIOLOGY SELECTION Top 50 most-read articles at PNAS for January 2011 80 CITATIONS

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. *Role: Senior author.*

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

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

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. *Role: Senior author.*

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. *Role: Senior author.*

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. *Role: Senior author.*

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 *Role: Co-author.* **151 CITATIONS**

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. *Role: Supervisor and co-author.*

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. *Role: Senior author.*

Khan, H. & **Archibald, J. M.** 2008. Lateral transfer of introns in the cryptophyte plastid genome. *Nucleic Acids Res.* 36, 3043-3053. *Role: Senior author.*

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. *Role: Co-author.*

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. *Role: Co-author.*

- Lane, C. E. & **Archibald, J. M.** 2008. New members of the genus *Hemiselms* (Cryptomonadales, Cryptophyceae). *J. Phycol.* 44, 339-450. *Role: Co-author.*
- 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 *Role: Senior author.*
- 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. *Role: Senior author.*
- Silver, 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. *Role: Senior author.*
- 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. *Role: Senior author.*
- 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. *Role: Senior author.*
- Lane, C. E., van den Heuvel, K., Kozera, C., Curtis, B. A., Parsons, B., Bowman, S., & **Archibald, J. M.** 2007. Nucleomorph genome of *Hemiselms andersenii* reveals complete intron loss and compaction as a driver of protein structure and function. *Proc. Natl. Acad. Sci. USA.* 104, 19908-19913. *Role: Senior author.* **FACULTY OF 1000 BIOLOGY SELECTION 137 CITATIONS**
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- Moog*, D. & **Archibald, J. M.** 2015. Genomic insights into *Paramoeba* spp. And their kinetoplastid endosymbionts. Annual Meeting of the Canadian Institute for Advanced Research, Program in Integrated Microbial Biodiversity, Victoria, British Columbia. (talk)
- Cenci*, U. & **Archibald, J. M.** 2014. Genomic investigation of metabolic links between *Paramoeba pemaquidensis* and its kinetoplastid endosymbiont. Dalhousie-CAU-Kiel Workshop on Evolutionary Genomics of Symbiosis, Dalhousie University. (talk)
- Gile, G.* & **Archibald, J. M.** 2014. Aminoacyl tRNA synthetase gene sharing in complex algae. Dalhousie-CAU-Kiel Workshop on Evolutionary Genomics of Symbiosis, Dalhousie University. (talk)

Cenci*, U. & **Archibald, J. M.** 2014. Genomic investigation of metabolic links between *Paramoeba pemaquidensis* and its kinetoplastid endosymbiont. Protist 2014 (Annual Meeting of the International Society for Evolutionary Protistology), Banff, Canada. (talk)

Moog*, D., Curtis, B.A. & **Archibald, J. M.** 2014. Genomic insights into *Paramoeba invadens* and its kinetoplastid endosymbiont. Protist 2014 (Annual Meeting of the International Society for Evolutionary Protistology), Banff, Canada. (poster)

Sibbald*, S., Cenci, U., Eglit, Y., O'Kelly, C.J. & **Archibald, J. M.** 2014. Diversity and evolution of *Paramoeba* species and their kinetoplastid endosymbionts. Protist 2014 (Annual Meeting of the International Society for Evolutionary Protistology), Banff, Canada. (poster)

Martin*, L., Curtis, B.A., Dlutek, M. & **Archibald, J. M.** 2014. Comparative genomics of cryptophyte and chlorarachniophyte algae. Protist 2014 (Annual Meeting of the International Society for Evolutionary Protistology), Banff, Canada. (poster)

Cenci*, U. & **Archibald, J. M.** 2014. Genomic investigation of metabolic links between *Neoparamoeba pemaquidensis* and its kinetoplastid endosymbiont. Annual Meeting of the Canadian Institute for Advanced Research, Program in Integrated Microbial Biodiversity, Czech Academy of Sciences, Czech Republic. (poster)

Gruber*, A. & **Archibald, J. M.** 2013. Occurrence and significance of C-terminal targeting motifs in organisms with secondary plastids. 12th International Colloquium on Endocytobiology and Symbiosis, Halifax, Nova Scotia. (talk)

Tanifuji*, G. & **Archibald, J. M.** 2013. Genome and transcriptome analyses of *Neoparamoeba pemaquidensis* and its kinetoplastid endosymbiont. 12th International Colloquium on Endocytobiology and Symbiosis, Halifax, Nova Scotia. (talk)

Tanifuji*, G. & **Archibald, J. M.** 2013. Genome and transcriptome analyses of the kinetoplastid endosymbiont of *Neoparamoeba pemaquidensis* (Amoebozoa). Annual Meeting of the Canadian Institute for Advanced Research, Program in Integrated Microbial Biodiversity, Whistler, British Columbia, Canada. (talk)

Curtis*, B. & **Archibald, J. M.** 2012. Cryptophyte and chlorarachniophyte nuclear genomes reveal evolutionary mosaicism and fate of nucleomorphs. Annual Meeting of the Canadian Institute for Advanced Research, Program in Integrated Microbial Biodiversity, Quebec City, Canada. (talk)

Tanifuji*, G. & **Archibald, J. M.** 2012. Genomics-enabled insight into the periplastidial compartments of cryptophyte and chlorarachniophyte algae, Protist 2012 (Annual Meeting of the International Society for Evolutionary Protistology), Oslo, Norway. (talk)

Tanifuji*, G., Onodera, N. T., Moore, C. E., Hopkins J. & **Archibald, J. M.** 2012. Comparative analysis of nuclear and nucleomorph gene expression in cryptomonad and chlorarachniophyte algae. (Annual Meeting of the International Society for Evolutionary Protistology), Oslo, Norway. (poster)

Maruyama*, S. & **Archibald, J. M.** 2012. Green and red algal phylogenetic signals in nuclear genes shared by eukaryotes bearing secondary plastids of green algal origin: looking beyond endosymbiotic versus lateral gene transfer. 20th Annual Meeting of the Society for Molecular Biology and Evolution, Dublin, Ireland. (poster)

Moore*, C. & **Archibald, J.M.**, 2012. Nucleomorph genome sequence of the cryptophyte alga *Chroomonas mesostigmatica* reveals lineage-specific gene loss and genome complexity. 20th Annual Meeting of the Society for Molecular Biology and Evolution, Dublin, Ireland. (poster)

Nakayama*, T., Ishida, K. & **Archibald, J. M.** 2012. Broad distribution of TPI-GAPDH fusion proteins among eukaryotes: evidence for glycolysis in the mitochondrion? Protist2012 (Annual Meeting of the International Society for Evolutionary Protistology), Oslo, Norway. (talk)

Moore*, C. & **Archibald, J.M.**, 2011. A small genome that 'thinks big': The complete nucleomorph genome of the cryptophyte alga *Chroomonas*. Joint meeting of the International Society of Protozoologists and the Phycological Society of America, Seattle, USA. (talk)

Tanifuji*, G & **Archibald, J. M.** 2011. Comparative analysis of nucleomorph and nuclear genomes in cryptophytes and chlorarachniophytes. Maritime Protistologists Meeting. Halifax, Canada. (talk)

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 kinetoplastid endosymbiont, 19th Annual Meeting of the Society for Molecular Biology and Evolution, Kyoto, Japan. (poster).

Tanifuji*, G. Examples for the study of genomes. 2011. Special seminar in department of anatomy, Iwate Medical University, Iwate, Japan (talk).

Kim*, E. & **Archibald, J. M.** 2011. RNA-Seq Data. *Guillardia theta* and *Bigeloviella natans* Genome Jamboree. DOE Joint Genome Institute, Walnut Creek, California (talk)

Curtis*, B. E. & **Archibald, J. M.** 2011. Endosymbiotic gene transfer, endosymbiotic gene replacement and genome / proteome mosaicism. *Guillardia theta* and *Bigeloviella natans* Genome Jamboree. DOE Joint Genome Institute, Walnut Creek, California (talk)

Hopkins*, J. F. & **Archibald, J. M.** 2011. Proteomic investigation of plastid / PPC proteins in *B. natans*. *Guillardia theta* and *Bigeloviella natans* Genome Jamboree. DOE Joint Genome Institute, Walnut Creek, California (talk)

Tanifuji*, G. & **Archibald, J. M.** 2011. Comparative analysis of nucleomorph and nuclear genomes: investigation of the plastid and PPC proteomes. *Guillardia theta* and *Bigeloviella natans* Genome Jamboree. DOE Joint Genome Institute, Walnut Creek, California (talk)

Maruyama*, S. & **Archibald, J. M.** 2011. Sex-determining locus in *G. theta*. *Guillardia theta* and *Bigeloviella natans* Genome Jamboree. DOE Joint Genome Institute, Walnut Creek, California (talk)

Hopkins*, J. F., Spencer, D. F., Gray, M. W. & **Archibald, J. M.** 2010. Proteomics reveals complex evolution of plastid- and nucleomorph-targeted proteins in the chlorarachniophyte *Bigeloviella*. 18th Annual Meeting of the Society for Molecular Biology and Evolution. Lyon, France. (talk)

Moore*, C. & **Archibald, J. M.** 2010. Small genomes, big questions: genome reduction as revealed by the 'large' nucleomorph genome of the cryptophyte alga *Chroomonas*. 18th Annual Meeting of the Society for Molecular Biology and Evolution. Lyon, France. (talk)

Maruyama*, S. Sugahara, J. **Archibald, J. M.**, Kanai, A. & Nozaki, H. 2010. Duplication, rearrangement and invention of novel tRNA genes in the nuclear and nucleomorph genomes of photosynthetic eukaryotes. 18th Annual Meeting of the Society for Molecular Biology and Evolution. Lyon, France. (poster)

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. 13th International Symposium on Microbial Ecology. Seattle, Washington. (poster)

Kim*, E. & **Archibald, J. M.** 2010. Evolution and ecology of uncultured eukaryotic microbes. Fourth Annual Meeting of the Canadian Institute for Advanced Research, Integrated Microbial Biodiversity

Program. Seattle, Washington. (talk)

Archibald*, J. M. 2009. Endosymbiotic gene transfer and genome evolution in secondary plastid-containing algae: insights from cryptophytes and chlorarachniophytes. *Phycologia* 48, 4-5.

Donaher*, N. & **Archibald, J. M.** 2009. The complete plastid genome sequence of the secondarily non-photosynthetic alga *Cryptomonas paramecium* 977/2a. Atlantic Omics Symposium, Moncton New Brunswick. (talk)

Eveleigh*, R., **Archibald, J. M.**, & Beiko*, R. G. 2009. Being *Aquifex aeolicus*: untangling a hyperthermophile's checkered past. Third Annual Meeting of the Canadian Institute for Advanced Research, Integrated Microbial Biodiversity Program. Asilomar, California. (poster)

Moore*, C. & **Archibald, J. M.** 2009. 454 pyrosequencing the nucleomorph genome of *Chroomonas mesostigmatica* CCAP1168: introns, synteny and gene density. Third Annual Meeting of the Canadian Institute for Advanced Research, Integrated Microbial Biodiversity Program. Asilomar, California. (poster)

Eveleigh*, R., **Archibald, J. M.**, & Beiko*, R. G. 2009. Being *Aquifex aeolicus*: untangling a hyperthermophile's checkered past. 17th Annual Meeting of the Society for Molecular Biology and Evolution. Iowa City, Iowa. (poster)

Donaher*, N., Lane, C. E., Malfatti, S. A., Chain, P. S. G., & **Archibald, J. M.** 2008. Pyrosequencing the A+T-rich nucleomorph genomes of the cryptophyte algae *Rhodomonas* sp. 1178 and *Cryptomonas paramecium*: insight into the pattern and process of nuclear genome reduction. Joint Annual meetings of the International Society for Evolutionary Protistology and the International Society of Protozoologists. Halifax, NS, Canada. (talk)

Horak*, A., Slamovits, C., Lane, C. E., Patron, N. J., **Archibald, J. M.** & Keeling, P. J. 2008. Comparative functional genomics of nucleomorphs. Joint Annual meetings of the International Society for Evolutionary Protistology and the International Society of Protozoologists. Halifax, NS, Canada. (poster)

Silver*, T. D. & **Archibald, J. M.** 2008. Chlorarachniophyte nucleomorphs: big surprises from small genomes. Joint Annual meetings of the International Society for Evolutionary Protistology and the International Society of Protozoologists. Halifax, NS, Canada. (poster)

Lane*, C. E. & **Archibald, J. M.** 2008. Origin and evolution of the cryptophyte nucleomorph proteome. Joint Annual meetings of the International Society for Evolutionary Protistology and the International Society of Protozoologists. Halifax, NS, Canada. (talk)

Donaher*, N. A., Lane, C. E., Malfatti, S. A., Chain, P. S. G. & **Archibald*, J. M.** 2008. Pyrosequencing the A+T-rich nucleomorph genomes of the cryptophyte algae *Rhodomonas* sp. 1178 and *Cryptomonas paramecium*: Insight into the pattern and process of nuclear genome reduction. 16th Annual Meeting of the Society for Molecular Biology and Evolution. Barcelona, Spain. (poster)

Archibald*, J. M., Gray, M. W., Keeling, P. J., McFadden, G. I. & Lane, C. E. 2007. Impact of secondary endosymbiosis on genome evolution and cell biology: A cryptomonad and a chlorarachniophyte nuclear genome. Third Annual DOE Joint Genome Institute User Meeting, Walnut Creek, California. (poster)

Kim*, E., Lane, C. E. & **Archibald, J. M.** 2007. Complete sequence and analysis of the mitochondrial genome of *Hemiselmis andersenii* CCMP644 (Cryptophyceae). Maritimes Protistology Conference. Halifax, NS, Canada. (talk)

Donaher*, N. A., Lane, C. E., **Archibald, J. M.** 2007 Preliminary analysis of the nucleomorph genome of the cryptomonad *Cryptomonas paramecium*. Maritimes Protistology Conference. Halifax, NS,

Canada. (talk)

Khan*, H. & **Archibald, J. M.** 2007. Introns within introns within introns: repeated lateral transfer and recent transposition of mobile introns in the plastid genomes of cryptomonads. Maritimes Protistology Conference. Halifax, NS, Canada. (talk)

Silver*, T. D. & **Archibald, J. M.** 2007. Chlorarachniophyte nucleomorph genome diversity and the anomalous Unid. sp. CCMP622. Maritimes Protistology Conference. Halifax, NS, Canada. (talk)

Silver*, T. D., Koike, S., Yabuki, A., Kofuji, R., Ishida, K.-I. & **Archibald, J. M.** 2007. Chlorarachniophyte nucleomorph genome diversity and the anomalous Unid. sp. CCMP622. 15th Annual Meeting of the Society for Molecular Biology and Evolution. Halifax, Nova Scotia. (poster)

Silver*, T. D. & **Archibald, J. M.** 2007. CCMP622 Unid. sp.- a chlorarachniophyte alga with a 'large' nucleomorph genome. 46th Annual Northeast Algal Symposium. Narragansett, Rhode Island, USA. (talk)

Donaher*, N. A., Lane, C. E., **Archibald, J. M.** 2007 Preliminary study of the *Cryptomonas paramecium* nucleomorph genome. Annual meeting for the Northeast Algal Society, Narragansett, Rhode Island, USA. (talk)

Donaher*, N. A., Lane, C. E., **Archibald, J. M.** 2007 Investigating the tiny nucleomorph genome of the cryptomonad *Cryptomonas paramecium*. 15th Annual Meeting of the Society for Molecular Biology and Evolution, Halifax, Nova Scotia, Canada. (poster)

Kim*, E., Lane, C. E. & **Archibald, J. M.** 2007. Complete sequence and analysis of the mitochondrial genome of *Hemiselmis andersenii* CCMP644 (Cryptophyceae). Phycological Society of America Annual Meeting, Providence, Rhode Island. (talk)

Lane*, C. E., van den Heuvel, K., Curtis, B., Fong, A., Kozera, C., Parsons, B., Bowman, S. and **Archibald, J. M.** 2007. The consequences of genome reduction in eukaryotes inferred from nucleomorph comparative genomics. Annual Meeting of the Phycological Society of America, Providence, Rhode Island. (talk)

Lane*, C. E., van den Heuvel, K., Curtis, B., Fong, A., Kozera, C., Parsons, B., Bowman, S. & **Archibald, J. M.** 2007. Eukaryotic genome reduction. Botanical Society of America, Chicago, Illinois. (talk)

Lane*, C. E., van den Heuvel, K., Curtis, B., Fong, A., Kozera, C., Parsons, B., Bowman, S. & **Archibald, J. M.** 2007. Impact of genome reduction on the eukaryotic proteome: nucleomorphs as a case study. 15th Annual Meeting of the Society for Molecular Biology and Evolution, Halifax, Nova Scotia, Canada. (talk)

Lane*, C. E. & **Archibald, J. M.** 2007. Re-assessing species boundaries in the cryptomonad genus *Hemiselmis*. Northeast Algal Symposium, Narragansett, Rhode Island. (talk)

Khan*, H. & **Archibald, J. M.** 2007. Introns within introns within introns: repeated lateral transfer and recent transposition of mobile introns in the plastid genomes of cryptomonads. 15th Annual meeting of the Society of Molecular Biology and Evolution. Halifax, Nova Scotia, Canada. (talk)

Khan*, H. & **Archibald, J. M.** 2007. Introns within introns within introns: repeated lateral transfer and recent transposition of mobile introns in the plastid genomes of cryptomonads. Evolution 2007. Joint meeting of the Society for the Study of Evolution, American Society of Naturalists, and Society of Systematic Biologists. Christchurch, New Zealand. (talk)

Archibald*, J. M., Gray, M. W., Keeling, P. J., McFadden, G. I. & Lane, C. E. 2007. Impact of secondary endosymbiosis on genome evolution and cell biology: A cryptomonad and a

- chlorarachniophyte nuclear genome. Second Annual DOE Joint Genome Institute User Meeting, Walnut Creek, California. (poster)
- Lane*, C. E., Kozera, C., Bowman, S., Curtis, B. & **Archibald, J. M.** 2006. Complete nucleomorph genome sequence of the cryptomonad *Hemiselmis rufescens*. Annual meeting of the International Society for Evolutionary Protistology. Wroclaw, Poland. (talk)
- Khan, H. Curtis, B. A., Terrent Bussey, J., Kozera, C., Bowman, S. & **Archibald, J. M.** 2006. The complete plastid genome sequence of the cryptomonad alga *Rhodomonas salina* CCMP1319. Annual meeting of the International Society for Evolutionary Protistology, Wroclaw, Poland. (poster)
- Silver, T. D. & **Archibald, J. M.** 2006. CCMP622 unid. sp.—a chlorarachniophyte alga with a 'large' nucleomorph genome. Annual meeting of the Society for Evolutionary Protistology, Wroclaw, Poland. (poster)
- Lane, C. E., Kozera, C., Bowman, S., Curtis, B. & **Archibald*, J. M.** 2006. Complete nucleomorph genome sequence of the cryptomonad *Hemiselmis rufescens*. Annual meeting of the Society for Molecular Biology and Evolution. Tempe, Arizona. (talk)
- Lane*, C. E., MacKinnon, M., Khan, H., Fong, A. & **Archibald, J. M.** 2005. Nucleomorph genome evolution in cryptomonads. Tri-National Young Investigators Workshop, Annual meeting of the Society for Molecular Biology and Evolution. Auckland, NZ. (talk)
- Phipps*, K., Lane, C. E., & **Archibald, J. M.** 2005. Nucleomorph genome diversity in cryptomonad algae: a preliminary investigation of the genus *Cryptomonas*. Maritimes Protistology Conference. Halifax, NS, Canada. (poster)
- Lane*, C. E., Khan, H., MacKinnon, M., Fong, A., Kozera, C., Curtis, B., Parsons, B., Bowman, S. & **Archibald, J. M.** 2005. New insights into nucleomorph genome evolution in cryptomonads. Maritimes Protistology Conference. Halifax, NS, Canada. (talk)
- Khan*, H., Lane, C. E., Kozera, C., Curtis, B., Parsons, B., Bowman, S. & **Archibald, J. M.** 2005. Host nuclear genome survey of the cryptomonads *Rhodomonas salina* and *Cryptomonas paramecium*. Maritimes Protistology Conference. Halifax, NS, Canada. (talk)
- Lane*, C. E., MacKinnon, M., Khan, H., Fong, A. & **Archibald, J. M.** 2005. Nucleomorph genome evolution in cryptomonads. Tri-National Young Investigators Workshop, Annual meeting of the Society for Molecular Biology and Evolution. Auckland, NZ. (talk)
- Lane, C. E., Khan, H., MacKinnon, M., Fong, A., Kozera, C., Curtis, B., Parsons, B., Bowman, S. & **Archibald*, J. M.** 2005. The nucleus and nucleomorph of cryptomonad algae—two extremes of a genomic continuum. 14th Annual meeting of the Society for Molecular Biology and Evolution. Auckland, NZ. (talk)
- Lane, C. E., Khan, H., MacKinnon, M., Fong, A., Kozera, C., Curtis, B., Parsons, B., Bowman, S. & **Archibald*, J. M.** 2005. Nuclear and nucleomorph genome evolution in cryptomonad algae. International symposium on the genomics of marine phytoplankton. Roscoff, France. (poster and talk)
- Archibald, J. M.**, Doolittle, W. F., Bruyant*, F., Cullen, J. J., Bielawski, J. P., Bowman, S., Dennis, P., Edwards, E., Field, C. A., Li, W. K. W., Löffler, F., Major, D. W., Nesbø, C., O'Malley, M., Papke, R. T., Roger, A. J., Stokes, H. W., & Susko, E. 2005. Microbial Environmental Genomics Alliance (MEGA). The US National Oceanographic Partnership Program, Workshop on Ocean Ecogenomics. Washington, DC. USA. (poster)
- Khan*, H., Lane, C. E., MacKinnon, M., Fong, A., Theophilou, S., Kozera, C., Curtis, B., Parsons, B., Bowman, S. & **Archibald, J. M.** 2005. Nuclear and nucleomorph genome evolution in cryptomonad algae. International Conference on Microbial Genomes. Halifax, Nova Scotia. (poster)

Lane*, C. E., MacKinnon, M., Khan, H. & **Archibald, J. M.** 2005. Genomic diversity and chromosome structure of cryptomonad nucleomorphs. 41st Northeast Algal Symposium, New Hampshire, USA. (talk)

MacKinnon, M., Fong, A., Lane*, C. E., Theophilou, S. & **Archibald, J. M.** 2005. Nucleomorph genome evolution in cryptomonad algae. Int'l Soc. for Evolutionary Protistology, 15th Ann. Meeting. Melbourne, Australia. (poster)

Archibald*, J. M., Theophilou, S., Fong, A. & MacKinnon, M. 2004. Genome reduction in eukaryotes: nucleomorph genomes as a case study. Joint Annual Meeting of the Society for Molecular Biology and Evolution and the American Genetic Association. Pennsylvania State University, Pennsylvania, USA. (talk)

Archibald*, J.M. 2004. Phagotrophy in the Chlorarachniophyte algae: implications for eukaryotic genome evolution. *J. Eukaryot. Microbiol.* **52**: 2. 56th Annual Meeting of the Society of Protozoologists. Bryant College, Rhode Island, USA. (talk)

Archibald*, J.M. 2004. Phagotrophy in the Chlorarachniophyte algae. Canadian Institute for Advanced Research and NASA Astrobiology Institute meeting on lateral gene transfer and the origins of eukaryotes. Harrison Hot Springs, British Columbia, Canada. (poster)

Archibald*, J. M. & Keeling, P. J. 2002. A novel polyubiquitin structure in Cercozoa and Foraminifera: evidence for a new eukaryotic supergroup. Int'l Soc. for Evolutionary Protistology, 14th Ann. Meeting. Vancouver, British Columbia, Canada. (talk)

Archibald*, J. M., Logsdon, J. M. Jr., Blouin, C. & Doolittle, W. F. 2001. Gene duplication and the evolution of CCT/TriC. Canadian Institute for Advanced Research, Evolutionary Biology Program, 15th Ann. Meeting. Val David, Quebec, Canada. (poster)

Archibald*, J. M., Doolittle, W. F. & Roger, A. J. 2001. Gene duplication, conversion and loss in the evolution of archaeal chaperonins. Int'l Meeting of the Society for Molecular Biology & Evolution, Ann. Meeting. Athens, Georgia, USA. (talk; Fitch Prize finalist)

Kovacs, E., Field, J., **Archibald, J. M.** & Lund*, P. A. (2001) Roles of CCT homologues in Archaea: studies on the halophile *Haloflex volcanii*. EuroConference and EMBO Workshop: Mechanisms and Cellular Functions of Molecular Chaperones. Sant Feliu de Guixols, Spain. (poster)

Archibald*, J. M., Logsdon, J. M. Jr., Blouin, C. & Doolittle, W. F. 2000. Gene duplication and the evolution of CCT/TriC. Workshop on Chaperonins: Structure and Function. Center for International Meetings on Biology, Madrid, Spain. (talk and poster; prize winner)

Archibald*, J. M., O'Kelly, C. J. & Doolittle, W. F. 2000. The chaperonin genes of jakobid flagellates: implications for early eukaryotic evolution. Canadian Institute for Advanced Research, Evolutionary Biology Program, 14th Ann. Meeting. Digby, Nova Scotia, Canada. (poster)

Archibald*, J. M., O'Kelly, C. J., Logsdon, J. M. Jr. & Doolittle, W. F. 2000. Phylogeny of chaperonins: implications for the origin and evolution of eukaryotes. Int'l Soc. for Evolutionary Protistology, 13th Ann. Meeting. Ceske Budejovice, Czech Republic. (talk)

Archibald, J. M., Logsdon*, J. M. Jr. & Doolittle, W. F. 1999. Ancient gene duplications in chaperonins: implications for eukaryotic phylogeny. Canadian Institute for Advanced Research, Evolutionary Biology Program, 13th Ann. Meeting. Banff, Alberta, Canada. (poster)

Archibald*, J. M., Logsdon, J. M. Jr. & Doolittle, W. F. 1999. Evolution of archaeal chaperonins by multiple independent gene duplications. Understanding chaperonin mediated protein folding. Karolinska Inst., Stockholm, Sweden. (talk and poster; student prize winner)

Archibald*, J. M., Logsdon, J. M. Jr. & Doolittle, W. F. 1999. Evolution of archaeal chaperonins by multiple independent gene duplications. Keystone Symposium. Archaea: Bridging the gap between Bacteria and Eukarya. Taos, New Mexico, USA. (poster)

Archibald*, J. M., Logsdon, J. M. Jr. & Doolittle, W. F. 1998. Phylogeny of chaperonin-containing TCP-1 genes from the early-diverging eukaryote, *Trichomonas vaginalis*. Int'l Soc. for Evolutionary Protistology, 12th Ann. Meeting. Flagstaff, Arizona, USA. (talk)

Archibald*, J. M., Logsdon, J. M. Jr. & Doolittle, W. F. 1998. Chaperonin-encoding genes from the pathogenic protozoa, *Trichomonas vaginalis* and *Giardia lamblia*. Faculty of Medicine Graduate Research Day. Halifax, Nova Scotia, Canada. (poster)

*presenter

INVITED PRESENTATIONS (86 in total)

2018—Invited symposium speaker, the 5th joint meeting of the Phycological Society of America & International Society of Protistologists, July 29th – August 2nd, Vancouver, British Columbia. Title: *10KP: a phylodiverse genome sequencing plan.*

2018—Invited speaker, Canadian Institute for Advanced Research, Integrated Microbial Biodiversity Program, Annual Meeting, June 12-15, Banff, Alberta. Title: *Impact of genome sequencing technologies on microbial diversity research.*

2018—Invited Plenary Speaker, CRC 1182 Junior Researchers Training Workshop, May 2-4, Kiel University, Germany. Title: *Euks in euks: new perspectives from kinetoplastid endosymbionts within pathogenic amoebae.*

2018—Invited Speaker, Reef Microbiome Workshop, McGill's Bellairs Research Station, Barbados (January 26-February 2nd). Title: *Gene transfer in eukaryotes.*

2017—Invited speaker, The Company of Biologists Workshop ('symbiosis in the microbial world'), Sussex, UK (November 5th –9th). Title: *Symbiosis: new perspectives from eukaryotic endosymbionts within pathogenic amoebae.*

2017—Invited Plenary Speaker, Norwegian Biologist's Association annual meeting (November 3rd), Oslo, Norway. Title: *One plus one equals one: historical and modern perspectives on endosymbiotic theory.*

2017—Invited Symposium Speaker, University of Bergen (November 2nd). Title: *Jostein Goksøyr's 'Evolution of Eukaryotic Cells': 50 years on.*

2017—Invited symposium speaker, 15th International Congress of Protistology, Prague, Czech Republic (July 30th – August 4th). Title: *Symbiosis: new perspectives from eukaryotic endosymbionts within pathogenic amoebae.*

2017—Invited lecturer, Frontiers in Evolutionary Ecology and Genomics Workshop, Beijing Normal University, China (June 24-26). Titles: *One plus one equals one: historical and modern perspectives on endosymbiotic theory AND Endosymbiosis and genome mosaicism in microbial eukaryotes.*

2017—Invited symposium speaker, Annual meeting of the Society for General Microbiology, Edinburgh, UK (April 1-6th). Title: *Symbiosis: new perspectives from eukaryotic endosymbionts within pathogenic amoebae.*

- 2017—Invited speaker, 67th Annual Conference of the Canadian Society of Microbiologists, University of Waterloo (June 20-23). Title: *One plus one equals one: historical and modern perspectives on symbiosis.*
- 2017—Invited speaker, Workshop in Symbiotic Interactions in the Oceans, Grand Wailea, Maui (January 23-27). Title: *Of macrobes and microbes: symbiosis, ecology and evolution.*
- 2016—Invited public lecture, Nova Scotian Institute of Science (December 5th). Title: *Molecular clocks: using DNA to infer evolution.*
- 2016—Acadia University Department of Biology Seminar Series (September 29). *Symbiosis: new perspectives from the eukaryotic endosymbionts of pathogenic amoebae.*
- 2016—Invited plenary speaker, 13th International Colloquium on Endocytobiology and Symbiosis, Kyoto, Japan. Title: *One plus one equals one: historical and modern perspectives on endosymbiotic theory.*
- 2016—Invited speaker and Discussion Leader, Gordon Research Conference on Mitochondria and Chloroplasts, June 19-24, Mount Snow, Vermont. Title: *One plus one equals one: historical and modern perspectives on endosymbiosis.*
- 2016—Invited plenary speaker, DFG ‘Origin and function of metaorganisms’, June 8-10, Kiel University, Germany. Title: *Endosymbiosis and genome mosaicism in microbial eukaryotes.*
- 2016—Invited plenary speaker, Harvard Plant Biology Symposium, May 2-3, Harvard University. Title: *One plus one equals one: historical and modern perspectives on the evolution of eukaryotic photosynthesis.*
- 2016—Invited speaker, EMBO/EMBL Symposium, January 26-29, Heidelberg, Germany. Title: *Gene transfer in eukaryotes: frequency, patterns and implications.*
- 2015—Dalhousie University Department of Microbiology & Immunology Seminar Series. Title: *One plus one equals one: endosymbiosis and genome mosaicism in eukaryotic evolution.*
- 2015—Invited plenary speaker, 6th European Phycological Congress, August 23-28, London, England. Title: *One plus one equals one: symbiosis and the evolution of complex life.*
- 2015—Invited ‘history of science’ speaker, NSF-funded ‘Research Experience for Undergraduates Program’, June 24, Wadsworth Centre, Albany, New York. Title: *One plus one equals one: symbiosis and the evolution of complex life.*
- 2014—Acadia University Department of Biology Seminar Series (November 13). Title: *One plus one equals one: symbiosis and the evolution of complex life.*
- 2014—Invited speaker, Arthur M. Sackler Colloquium of the National Academy of Sciences, October 15-17, Irvine, California. Title: *Nuclear organelles.*
- 2014—University of New Brunswick Department of Biology Seminar Series (October 3). Title: *One plus one equals one: symbiosis and the evolution of complex life.*
- 2014—Invited plenary speaker (Seymour H. Hutner Young Investigator Prize winner), International Society of Protistologists Annual Meeting, August 3-8, Banff, Alberta. Title: *Problems and progress in protistology.*
- 2014—Canadian Institute for Advanced Research, Integrated Microbial Biodiversity Program, Annual Meeting, June 25-29, Czech Academy of Sciences, Czech Republic. Title: *Serial Endosymbiosis Theory: who said what, when and why.*

- 2014—"Kieler Woche Guest". Invited by the Natural & Mathematical Faculty at Kiel University, Germany, to give a public lecture on science as part of their Kiel Week celebrations (June 21-29). Title: *One plus one equals one: symbiosis and the evolution of complex life*.
- 2014—Concordia University Department of Biology Seminar Series (April 17). Title: *One plus one equals one: endosymbiosis and genome mosaicism in the diversification of complex life*.
- 2013—Invited speaker, EMBO Conference on Comparative Genomics of Eukaryotic microorganisms, October 19-24, San Feliu de Guixols, Spain. Title: *Euks in euks: new perspectives from the Ichthyobodo-related endosymbionts of pathogenic amoebae*.
- 2013—Invited symposium speaker, Microbial Diversity Summer Course, Marine Biological Laboratory, Woods Hole, MA. Title: *Genomic perspectives on the origin and spread of photosynthesis in eukaryotes*.
- 2013—Invited speaker, ICOP XIV (International Congress of Protistology), Vancouver, Canada. Title: *Euks in euks: new perspectives from the Ichthyobodo-related endosymbionts of pathogenic amoebae*.
- 2013—University of Ottawa Department of Biology Seminar Series. Title: *One plus one equals one: endosymbiosis and genome mosaicism in the diversification of complex life*.
- 2012—Queen Mary University of London, School of Biological and Chemical Sciences, Seminar Series. Title: *One plus one equals one: plastid evolution and genome mosaicism in microbial eukaryotes*.
- 2012—Invited keynote address, book launch for "On the origin of eukaryotic cells", in honour of the late Lynn Margulis, Lisbon, Portugal. Title: *Lynn Margulis (1938-2011)*.
- 2012—University of Cambridge Department of Biochemistry Seminar Series. Title: *Endosymbiosis, genome mosaicism and the evolution of photosynthetic eukaryotes*.
- 2012—Christian Albrechts University (Germany) – Dalhousie University Joint Workshop. Title: *Overview of Comparative Genomics and Evolutionary Bioinformatics at Dalhousie*.
- 2012—Invited public lecture, Rethinking Biology and Evolution: New Approaches for the New Century, Lisbon, Portugal. Title: *Cellular evolution: modern perspectives on symbiosis and the diversification of complex life*
- 2012—Invited speaker, Workshop on Biology and Evolution, Lisbon, Portugal. Title: *Genomics meets philosophy: symbiosis and the 'tree of life'*
- 2012—Invited speaker, Gordon Research Conference (Marine Microbes), Lucca, Italy. Title: *Genome mosaicism in marine microbial eukaryotes: how much and what does it mean?*
- 2011—Symposium speaker, 19th Annual Meeting of the Society for Molecular Biology and Evolution. Kyoto, Japan. Title: *One plus one equals one: secondary endosymbiosis and genome mosaicism in microbial eukaryotes*.
- 2011—"Molecular evolution in the genomic era", Rome 3 University, Rome, Italy. Title: *Endosymbiosis and genome mosaicism in secondary plastid-bearing eukaryotes*.
- 2011—Evolutionary Genomics Workshop, Institute for Pure & Applied Mathematics, UCLA, CA. Title: *Genome mosaicism in microbial eukaryotes*.

- 2011—University of New Brunswick Department of Biology Seminar Series. Title: *Endosymbiosis and genome mosaicism in microbial eukaryotes.*
- 2011—Plant and Animal Genome XIX Conference, San Diego, CA. Title: *The genomes of nucleomorph-bearers.*
- 2010—Memorial Symposium for the 26th International Prize for Biology, Tsukuba, Japan. Title: *Endosymbiosis—a driver of molecular and cellular evolution.*
- 2010—11th International Colloquium on Endocytobiology and Symbiosis, Tromsø, Norway. Title: *Endosymbiosis and genome mosaicism in cryptophyte and chlorarachniophyte algae.*
- 2009—London Natural History Museum, Seminar Series, London, UK. Title: *You are what you eat: endosymbiosis and genome evolution in unicellular eukaryotes.*
- 2009—University of Exeter, School of Biosciences Seminar Series, Exeter, UK. Title: *Bonsai genomics: origin and evolution of reduced endosymbiotic nuclear genomes.*
- 2009—Mount Allison University Biochemistry Department Seminar Series. Title: *You are what you eat: endosymbiosis and genome evolution in cryptophyte and chlorarachniophyte algae.*
- 2009—Symposium speaker, Annual meeting of the Society for General Microbiology, Heriot-Watt University, Edinburgh, Scotland. Title: *The eukaryotic Tree of Life: Endosymbiosis takes its TOL.*
- 2009—Symposium speaker, 9th International Phycological Congress, Tokyo, Japan. Title: *Endosymbiotic gene transfer and genome evolution in secondary plastid-containing algae: insights from cryptophytes and chlorarachniophytes.*
- 2009—Symposium speaker, 17th Annual Meeting of the Society for Molecular Biology and Evolution. Iowa City, Iowa. Title: *Vanishing nucleomorph genomes: Where do they go and how do they do it?*
- 2009—University of Geneva Departmental of Zoology and Animal Biology Seminar Series, Geneva, Switzerland. Title: *Bonsai genomics: the remnant nuclear genomes of cryptophyte and chlorarachniophyte algae.*
- 2009—Symposium speaker, Perspectives on the Tree of Life, Dalhousie University, Halifax, NS, Canada. Title: *Genomic threads in the tapestry of photosynthetic life: implications for ‘tree thinking.’*
- 2009—Symposium speaker, IGERT Program in Comparative Genomics, Annual Symposium, University of Arizona, Tuscon, Arizona. Title: *The eukaryotic Tree of Life: Endosymbiosis takes its TOL.*
- 2009—Canadian Institute for Advanced Research Junior Fellow Academy Meeting, Toronto, ON. Title: *Integrated Microbial Biodiversity Program*
- 2009—Annual Meeting of the American Association for the Advancement of Science (AAAS), Darwin ‘Mania’ Symposium (organelles), Chicago, Illinois. Title: *Symbiosis as an evolutionary driver: mergers of cells and genomes.* Speaker and Chair.
- 2008—Tree of Life Workshop, Dalhousie University, Halifax, NS, Canada. Title: *Cryptophytes.*
- 2008—Mitochondria, ribosomes & cells: a symposium in honour of Mike Gray, Dalhousie University, Halifax, NS, Canada. Title: *Endosymbiosis and eukaryotic genome evolution.*
- 2008—Canadian Institute for Advanced Research, Integrated Microbial Biodiversity Program, 2nd Ann. Meeting. Lac Carling, Quebec, Canada. Title: *Nucleomorph genomes: “where are we now?”*

- 2008—International Symposium on Protist Biology (Plenary Speaker), University of Tsukuba, Japan. Title: *Protist diversity and the eukaryotic Tree of Life: endosymbiosis takes its TOL.*
- 2008—Dalhousie University Department of Biology Seminar Series. Title: *Going, going, not quite gone: the weird and wonderful world of endosymbiotic nuclear genomes.*
- 2007—University of Toronto Department of Ecology & Evolution Seminar Series. Title: *Bonsai genomics: understanding the process of genome reduction in eukaryotes.*
- 2007—Canadian Institute for Advanced Research, Integrated Microbial Biodiversity Program, 1st Ann. Meeting. Vancouver, British Columbia, Canada. Title: *Endosymbiosis, gene transfer and eukaryotic evolution.*
- 2007—American Genetic Association Annual Meeting, Bloomington, IA. Title: *Genome reduction in eukaryotes: nucleomorph genomes as a case study.*
- 2007—Second Annual US DOE Joint Genome Institute User Meeting, Walnut Creek, CA. Title: *Impact of secondary endosymbiosis on genome evolution and cell biology: a cryptomonad and a chlorarachniophyte nuclear genome.*
- 2007—4th European Phycological Congress, Oviedo, Spain. Title: *Secondary endosymbiosis and genome evolution: the nuclear and nucleomorph genomes of cryptophyte and chlorarachniophyte algae.*
- 2007—Acadia University Biology Department Seminar Series. Title: *Bonsai genomics: understanding the process of genome reduction in eukaryotes.*
- 2007—Canadian Institute for Advanced Research, Evolutionary Biology Program, 18th Ann. Meeting. Halifax, NS, Canada. Title: *Genome evolution writ small.*
- 2006—Microbial Biodiversity Workshop, Banff, Alberta, Canada. Title: *Genome size diversity in microbial eukaryotes.*
- 2005—Canadian Institute for Advanced Research, Workshop on Microbial Biodiversity, Vancouver, BC, Canada. Title: *The nucleus and nucleomorph of cryptomonad algae—two extremes of a genomic continuum.*
- 2005—Annual General Meeting of the Canadian Society for Microbiologists, Halifax, NS, Canada. Title: *Presentation on “Careers in Academia” as part of roundtable discussion.*
- 2004—Canadian Institute for Advanced Research, Evolutionary Biology Program, 17th Ann. Meeting. Pine Hill, Quebec, Canada. Title: *On the feeding habits of chlorarachniophyte algae.*
- 2004—NASA Astrobiology Institute and Canadian Institute for Advanced Research meeting on lateral gene transfer and the origins of eukaryotes, Harrison Hot Springs, British Columbia, Canada. Title: *Lateral gene transfer and the plastid proteome of algae.*
- 2003—Department of Biochemistry & Molecular Biology, Dalhousie University, Halifax, Nova Scotia, Canada. Title: *Lateral gene transfer and the plastid proteome of algae.*
- 2002—Canadian Institute for Advanced Research, Evolutionary Biology Program, 16th Ann. Meeting. Harrison Hot Springs, British Columbia, Canada. Title: *Phylogenetic origins of the host and endosymbiont components of chlorarachniophyte algae.*

- 2002—Departments of Botany and Zoology, University of British Columbia, Vancouver, British Columbia, Canada. Title: *Recycled plastids: a green (and red) movement in eukaryotic evolution*.
- 2002—Department of Biochemistry and Molecular Biology, Dalhousie University, Halifax, Nova Scotia, Canada. Title: *Recycled plastids: a green (and red) movement in eukaryotic evolution*.
- 2002—Department of Botany, University of British Columbia, Vancouver, British Columbia, Canada. Title: *Gene duplication, gene conversion and the evolution of group II chaperonins*.
- 2001—Izaak Walton Killam Memorial Fellowship Committee Banquet, University of British Columbia, Vancouver, British Columbia, Canada. Title: *Origin and evolution of apicomplexan parasites*.
- 2001—Canadian Institute for Advanced Research, Evolutionary Biology Program, 15th Ann. Meeting. Val David, Quebec, Canada. Title: *Gene conversion and the evolution of archaeal chaperonins: a likelihood method for detecting recombination*.
- 2000—Center for International Meetings on Biology, Workshop on Chaperonins: Structure and Function. Madrid, Spain. Title: *Gene duplication and the evolution of CCT/Tric*.

PUBLIC AWARENESS / OUTREACH / EDUCATION

- 2016—**Invited public lecture**. Nova Scotian Institute of Science, Natural History Museum (December 5th). Title: *Molecular clocks: using DNA to infer evolution*.
- 2015—**Coordinator**. IB Biology and Chemistry High School Research Day (~30 Park View Education Centre Students visited the department to carry out their research projects)
- 2014—**Author Blog**. “Microbes Matter” Oxford University Press (blog.oup.com)
- 2014—**Trade book**. “One plus one equals one: symbiosis and the evolution of complex life” Oxford University Press.
- 2014—**Invited public lecture**. Invited by the Natural & Mathematical Faculty at Kiel University, Germany, to give a public lecture on science as part of their Kiel Week celebrations (June 21-29). Title: *One plus one equals one: symbiosis and the evolution of complex life*.
- 2012—**Invited keynote address**. Book launch for translation of “On the origin of eukaryotic cells”, in honour of the late Lynn Margulis, Lisbon, Portugal. Title: *Lynn Margulis (1938-2011)*.
- 2012—**Invited public lecture**. Rethinking Biology and Evolution: New Approaches for the New Century, Lisbon, Portugal. Title: *Cellular evolution: modern perspectives on symbiosis and the diversification of complex life*
- 2010—**Invited presentation**. Title: How do Microbes Rule the World? ‘The Next Big Question’ National Tour, sponsored by the Canadian Institute for Advanced Research.
- 2009—**Newspaper article**. Title: Government should care about research. *The Chronicle Herald*, February 18.
- 2008—**Newspaper article**. Title: Look on the bright side of microbial life. *The Chronicle Herald*, November 17.
- 2008—**Invited presentation**. Science Career Day, Prince Andrew High School, Dartmouth, Nova Scotia. Title: *Life science research as a career*.
- 2007—**Judge**. Canada-Wide Science Fair, Agricultural College, Truro, Nova Scotia Canada.
- 2006—**Invited presentation**. Annual General Meeting of the Genealogical Association of Nova Scotia, Halifax, NS, Canada. Title: *The gene in genealogy: what is DNA and how is it used in genealogical research?*
- 2005—**Invited Presentation**. Genome Atlantic, Science Education and Community Outreach Initiative, Halifax, NS, Canada. Presentation on genome science and technology given to Gaetz Brook Junior High students. Title: *MEGA: Microbial Environmental Genomics Alliance*.
- 2005—**Roundtable discussion participant**. Annual General Meeting of the Canadian Society for Microbiologists, Halifax, NS, Canada. Title: *Presentation on “Careers in Academia”*

BOOK AND BOOK CHAPTER REVIEWER

CRC Press
Oxford University Press
Quarterly Review of Biology
Pearson Publishing
Springer
W.H. Freeman and Company

MANUSCRIPT REVIEWER (232 manuscripts for the following 49 international journals since 09/2003)

Acta Protozoologica (1), *Acta Societatis Botanicorum Poloniae* (1), *Australasian Plant Pathology* (1), *Biochimica et Biophysica Sinica* (2), *BioEssays* (4), *BioSystems* (1) *Biotechniques* (1), *BMC Biology* (3), *BMC Evolutionary Biology* (9), *BMC Genomics* (4), *Botanica Marina* (1), *Current Biology* (21), *Encyclopedia of Life Sciences* (1), *Eukaryotic Cell* (3), *Evolutionary Bioinformatics* (1), *FEBS Letters* (1), *Gene* (2), *Genome Biology* (1), *Genome Biology and Evolution* (16), *International Journal for Parasitology* (1), *International Journal of Biochemistry and Cell Biology* (2), *International Journal of Systematic and Evolutionary Microbiology* (3), *Journal of Biological Chemistry* (1), *Journal of Eukaryotic Microbiology* (4), *Journal of Molecular Evolution* (19), *Journal of Phycology* (8), *Journal of Plant Research* (1), *Journal of Plant Physiology* (1), *Journal of Structural Biology* (1), *Journal of Theoretical Biology* (2), *Microbiology* (1), *Mobile Genetic Elements* (1), *Molecular Biology and Evolution* (38), *Molecular Ecology Resources* (1), *Molecular Genetics and Genomics* (2), *Molecular Phylogenetics and Evolution* (2), *Nature* (7), *Nature Communications* (4), *Nature Ecology & Evolution* (1), *Nature Reviews Microbiology* (1), *New Phytologist* (2), *Nucleic Acids Research* (2), *PLoS Biology* (1), *PLoS Genetics* (1), *Proceedings of the National Academy of Sciences, USA* (21), *Proceedings of the Royal Society of London* (3), *Protist* (11), *Science* (6), *Science Advances* (1), *Symbiosis* (2), *Trends in Ecology and Evolution* (1), *Trends in Genetics* (2), *Trends in Microbiology* (1), *Trends in Plant Science* (1)

INVITED JOURNAL EDITORSHIPS AND BOARD MEMBERSHIPS

2016	Guest Editor , <i>Proceedings of the National Academy of Sciences, USA</i>
2015	Guest Editor , <i>Proceedings of the National Academy of Sciences, USA</i>
2014	Guest Editor , <i>Proceedings of the National Academy of Sciences, USA</i>
2014-present	Editorial Board Member , <i>Environmental Microbiology</i> (International peer-reviewed journal)
2013-present	Editorial Board Member , <i>Eukaryotic Cell</i> (International peer-reviewed journal)
2013	Guest Editor , <i>Proceedings of the National Academy of Sciences, USA</i>
2012-present	Editorial Board Member , <i>Current Biology</i> (International peer-reviewed journal)
2011	Guest Editor , <i>Proceedings of the National Academy of Sciences, USA</i>
2010-present	Associate Editor , <i>Genome Biology and Evolution</i> (International peer-reviewed journal)
2010-2011	Associate Editor , <i>Molecular Phylogenetics & Evolution</i> (International peer-reviewed journal)
2009-present	Editorial Board Member , <i>BMC Biology</i> (International peer-reviewed journal)
2009	Guest Editor , <i>Proceedings of the National Academy of Sciences, USA</i>
2009-2011	Associate Editor , <i>Journal of Phycology</i> (International peer-reviewed journal)
2008	Guest Editor , <i>Proceedings of the National Academy of Sciences, USA</i>
2007-2010	Associate Editor , <i>Phycological Research</i> (International peer-reviewed journal)

NATIONAL AND INTERNATIONAL GRANT PROPOSAL REVIEWER

2018 German Research Foundation (DFG), Emmy Noether Program

2015	Moore Foundation Marine Microbiology Initiative, Experimental Model Systems Program
2014	NASA Astrobiology Institute
2014	Canadian Foundation for Innovation, Major Science Initiatives Expert Review Committee Member
2014	French National Research Agency, pre-proposal reviewer
2014	Canadian Institutes of Health Research, Genomics Panel
2013	Heinrich Heine University, Structural Research Fund, Düsseldorf, Germany
2011	Gordon and Betty Moore Foundation (USA)
2011-2012	French National Research Agency
2009	NASA Astrobiology Institute
2009	National Science Foundation / USDA, Genomics Panel
2008-2010	Canadian Institutes of Health Research
2008-2009	Biotechnology and Biological Sciences Research Council, UK
2008	Canadian Foundation for Innovation
2008	Granting Agency of the Academy of Sciences of the Czech Republic
2008	European Science Foundation
2006	Austrian Science Foundation
2005-2009	Natural Sciences and Engineering Research Council of Canada
2004, 2007	Natural Environmental Research Council, UK
2003-2004	NASA Exobiology and Evolutionary Biology Program, USA
2003-2010	National Science Foundation, USA

NATIONAL AND INTERNATIONAL HONOURS AND SERVICE

2018	Advisory Committee Member , future research opportunities, Gordon and Betty Moore Foundation
2018-	Steering Committee Co-Chair , Royal Society of Canada, Atlantic Division
2017	Co-Organizer , Workshop on symbiosis (The Company of Biologists), Sussex, UK.
2017-2020	Steering Committee Member , Royal Society of Canada, Atlantic Division
2016	Co-Lead Organizer , Trainee Summit, EMBL, Heidelberg, Germany
2016	Discussion Leader , Gordon Research Conference on Mitochondria and Chloroplasts (Vermont)
2015-16	Organizing Committee Member , EMBL/EMBO – Moore Foundation Marine Microbiology Initiative Symposium on Aquatic Microeukaryotes, EMBL, Heidelberg, Germany
2014	Lead Organizer , Dalhousie University – Christian Albrechts University Workshop on Evolutionary Genomics of Symbiosis, Halifax, Nova Scotia Canada.
2014	Expert Review Committee Member , Canadian Foundation for Innovation, Major Science Initiatives
2014	Peer Review Committee Member , Canadian Institutes of Health Research, Genomics Panel
2013	Organizing Committee Chair , 12 th International Colloquium on Endocytobiology and Symbiosis, Halifax, Nova Scotia Canada.
2011	Lead Organizer , <i>Guillardia theta</i> and <i>Bigeloviella natans</i> International Genome Jamboree. Sept 7-9, DOE Joint Genome Institute, Walnut Creek, California
2010-2011	Organizing Committee Member , Marine Microbial Eukaryote Transcriptome Project (Gordon and Betty Moore Foundation and the National Center for Genome Resources)
2011	Peer Review Committee Member , Canadian Institutes of Health Research, Genomics Panel
2010-2013	Peer Review Committee Member , Canadian Institutes of Health Research, New Investigator Awards (Panel C)
2009-2010	Peer Review Committee Member , Canadian Institutes of Health Research, Doctoral Research Award A (DRA) and Masters Awards (CGA)
2009-2011	Treasurer , International Society for Molecular Biology & Evolution

- 2009 **Chair and Coordinator**, Undergraduate Diversity Mentoring Program, held in conjunction with the 17th Annual Meeting of the Society for Molecular Biology and Evolution, Iowa City, Iowa
- 2008-2009 **Associate Director**, Canadian Institute for Advanced Research, Program in Integrated Microbial Biodiversity
- 2008-2009 **Peer Review Committee Member**, Canadian Institutes of Health Research, Human Microbiome Catalyst Grants
- 2008-2009 **Peer Review Committee Member**, Canadian Institutes of Health Research, Doctoral Research Award A (DRA) and Masters Awards (CGA)
- 2008 **Invited participant**, Human Microbiome Project Workshop, funded by Genome Canada and CIHR Institute of Infection and Immunity (III), Toronto, Canada
- 2008 **Invited participant**, “Where to next with the tree of life? A workshop sponsored by the National Science Foundation” (sponsored by NSF, April 3-6, Washington, DC, USA)
- 2008 **Scientific Committee Member**, 16th Annual Meeting of the Society for Molecular Biology and Evolution, Barcelona, Spain
- 2008 **Co-Chair**, Undergraduate Diversity Mentoring Program, held in conjunction with the 15th Annual Meeting of the Society for Molecular Biology and Evolution, Barcelona, Spain
- 2007 **Scientific Committee Member**, 15th Annual Meeting of the International Society for Evolutionary Protistology, Halifax, Nova Scotia Canada.
- 2007-2008 **Peer Review Committee Member**, Canadian Institutes of Health Research, Doctoral Research Award A (DRA) and Masters Awards (CGA)
- 2007 **Organizing Committee Chair**, 15th Annual Meeting of the Society for Molecular Biology and Evolution, Halifax, Nova Scotia Canada. (~700 delegates from >25 countries)
- 2007 **Chair and Coordinator**, Inaugural Undergraduate Diversity Mentoring Program, held in conjunction with the 15th Annual Meeting of the Society for Molecular Biology and Evolution.
- 2005 **International symposium organizer** (“*Origin and evolution of photosynthetic life*”), Joint meeting of the International Society for Molecular Biology and Evolution and the Australasian Genetic Association, Auckland, New Zealand.
- 2003 **Invited participant**, Genome Canada/Environment Canada-sponsored Workshop
- 2002-2004 **North American Councilor**, International Society for Evolutionary Protistology

PROFESSIONAL AFFILIATIONS

- 2017- Nova Scotian Institute of Science
- 2007-present International Society of Endocytobiology
- 2004-2005 Nova Scotian Institute of Science
- 2003-present Canadian Institute for Advanced Research
- 2002-present International Society of Protistologists
- 1999-present International Society for Evolutionary Protistology
- 1999-present Society for Molecular Biology and Evolution (inc. Treasurer 2009-2011)

UNIVERSITY AND DEPARTMENTAL ADMINISTRATIVE ACTIVITIES

- 2018 **Member**, Dalhousie University, Faculty of Medicine, Canadian Institutes of Health Research Internal Peer Review Committee
- 2017-18 **Member**, Organizing Committee Member, 2018 Royal Society of Canada AGM (held at Dalhousie University)
- 2016–2018 **Member**, Department of Biochemistry & Molecular Biology Academic Planning Committee
- 2016 **Member**, Dalhousie University, Faculty of Medicine, Canadian Institutes of Health Research Internal Peer Review Committee
- 2016–2017 **Member**, Dalhousie University, Department of Physiology & Biophysics Survey / Search Committee
- 2016–2019 **Member**, Dalhousie University Biological Safety Committee
- 2015–2016 **Member**, Dalhousie’s Faculty of Medicine Medical Research Advisory Committee

- 2014–2015 **Member**, Department of Biochemistry & Molecular Biology Promotions and Tenure Committee
- 2014 **Lead Organizer**, Dalhousie University—Kiel University Workshop on Evolutionary Genomics of Symbiosis (Dec 1-2)
- 2013–2014 **Member**, Dalhousie University—IWK Health Centre, Department of Diagnostic Radiology Review Committee
- 2013–2014 **Member**, Dalhousie Medicine New Brunswick Academic Affairs Committee
- 2011–present **Member**, Faculty of Graduate Studies College of Ph.D. Thesis Examination Chairs
- 2010–2015 **Graduate Coordinator**, Department of Biochemistry & Molecular Biology
- 2009–2010 **Co-Chair**, Faculty of Medicine Basic Science Promotions and Tenure Committee
- 2008–2009 **Chair**, Department of Biochemistry & Molecular Biology Promotions and Tenure Committee
- 2008–2009 **Member**, Faculty of Medicine Basic Science Promotions and Tenure Committee
- 2008 **Judge**, Faculty of Medicine Graduate Student Research Day
- 2008–2009 **Member**, Department of Biochemistry & Molecular Biology Job Search Committee
- 2007 **Facilitator**, Faculty of Medicine Workshop on Scholarly Integrity
- 2007–2012 **Patrick Prize Committee Member**, Department of Biochemistry & Molecular Biology
- 2006–2010 **Associate Graduate Coordinator**, Department of Biochemistry & Molecular Biology
- 2006–2007 **Member**, Department of Biochemistry & Molecular Biology Promotions and Tenure Committee
- 2005–present **Member**, Department of Biochemistry & Molecular Biology Graduate Advisory Committee
- 2004–2005 **Member**, Department of Biochemistry & Molecular Biology Promotions and Tenure Committee
- 2004 **Judge**, Faculty of Medicine Graduate Student Research Day
- 2004–2005 **Chair**, Department of Biochemistry & Molecular Biology Website Committee
- 2004–2009 Department of Biochemistry & Molecular Biology Seminar Series, Chair, Coordinator and Committee Member

THESIS EXAMINATIONS (international)

- 2017—PhD External Examiner for Sebastian Wittek, Mathematisch-Naturwissenschaftlichen Fakultät der Universität zu Köln. Thesis Title: *Acquisition of photoautotrophy in kleptoplastic dinoflagellates—Nusuttodinium aeruginosum/acitotum as a case study.*
- 2013—PhD External Examiner for Dong Wang, School of Molecular and Biomedical Sciences (Genetics), University of Adelaide, Australia. Thesis Title: *Chloroplast DNAs diversify nuclear and mitochondrial genomes in plants.*
- 2013—BSc Honours External Examiner for Vojta David, Faculty of Science, University of South Bohemia, Czech Republic. Thesis Title: *Assembly and annotation of a mitochondrial genome from the kinetoplastid protist Perkinsela.*
- 2010—PhD External Examiner for Jillian Ackland, School of Botany, University of Melbourne, Australia. Thesis Title: *The evolution and function of the dinoflagellate mitochondrion.*
- 2009—PhD External Examiner for Rhodri Lewis, Department of Zoology, University of Oxford, UK. Thesis Title: *Multigene studies of cercozoan phylogeny and evolution.*
- 2009—PhD External Examiner for Fabien Burki, Department of Zoology and Animal Biology, University of Geneva, Switzerland. Thesis Title: *A phylogenomic contribution to the eukaryotic tree of life.*
- 2008—Habilitationsvorhaben bon Frau Kerstin Hoef-Emden, Mathematisch-Naturwissenschaftlichen Fakultät der Universität zu Köln (“Habilitation examination” for Dr. rer. nat. Kerstin Hoef-Emden, Faculty of Mathematics and Natural Sciences, University of Cologne, Germany). Thesis title:

Towards a revision of genera and species in the class Cryptophyceae by combining molecular phylogeny and classical morphological methods.

SUPERVISORY EXPERIENCE

Postdoctoral Fellows

Jong Im Kim, Ph.D.	Visiting Scientist, August 2018-present
Lucie Gallot, Ph.D.	March 2018-present
Gina Filloramo, Ph.D.	March 2017-present
Jan de Vries, Ph.D.	September 2016-present
Anna Åsman, Ph.D.	September 2016-present
Jong Im Kim, Ph.D.	Visiting Scientist, October 2016-November 2017 (Current position: postdoctoral fellow, Chungnam National University, Republic of Korea)
Cameron Grisdale, Ph.D.	February 2015-May 2017 (Current position: Bioinformatician, BC Cancer Agency)
Daniel Moog, Ph.D.	April 2014-May 2016 (Current position: Postdoctoral fellow, Marburg, Germany)
Ugo Cenci, Ph.D.	February 2014-January 2016 (Current position: Postdoctoral fellow, Lille, France)
Gillian Gile, Ph.D.	December 2013-August 2015 (Current position: Faculty member, Arizona State University, Tempe)
Bruce Curtis, Ph.D.	December 2012-present
Ansgar Gruber, Ph.D.	September 2012-September 2013 (Current position: postdoctoral fellow, Germany)
Jimeng Hua, Ph.D.	April 2012-May 2013 (Current position: postdoctoral fellow, China)
Takuro Nakayama, Ph.D.	June 2011-April 2013 (Current position: postdoctoral fellow, Japan)
Shinichiro Maruyama, Ph.D.	November 2009-March 2013 (Current position: Faculty member, Dept. of Ecology and Evolution, Tohoku University, Japan)
Goro Tanifuji, Ph.D.	January 2009-August 2013 (Current position: Faculty member, National Museum of Nature and Science, Tsukuba University, Japan)
Julia Hopkins, Ph.D.	September 2007-May 2013 (Current position: postdoctoral fellow, University of Toronto)
Eunsoo Kim, Ph.D.	Winter 2007–Winter 2012 (Current position: Faculty member, American Museum of Natural History, New York)
Christopher Lane, Ph.D.	Fall 2004–Summer 2008 (Current position: Faculty member, Dept. of Biology, University of Rhode Island)
Stan Theophilou, Ph.D.	Winter 2004–Fall, 2004

Graduate Students

Anna Vanclova	June 2018-present
Morgan Colp	January 2018-present
Vojtech David, M.Sc.	September 2015-December 2017
Shannon Sibbald	September 2015-August 2017 (funded by NSERC scholarship) <u>MSc Thesis:</u> “ <i>Symbiosis and its impact on eukaryotic evolution</i> ”
Christa Moore, Ph.D.	September 2008-June 2013 (NSERC CGS Scholarship recipient) <u>Ph.D. Thesis:</u> Nucleomorph and plastid genome evolution in the cryptophyte <i>Chroomonas mesostigmatica</i>
Bruce Curtis, Ph.D.	May 2008-October 2012 <u>Ph.D. Thesis:</u> “ <i>Endosymbiotic gene transfer in the nucleomorph-containing organisms Bigeloviella natans and Guillardia theta</i> ”
Robert Eveleigh	September 2008-2011 <u>MSc Thesis:</u> “ <i>Being Aquifex aeolicus: untangling a hyperthermophile’s checkered past</i> ”

Natalie Donaher	September 2006-Spring 2009 (NSERC CGS Scholarship recipient) <u>MSc Thesis</u> : “ <i>The complete plastid genome sequence of the secondarily non-photosynthetic alga <u>Cryptomonas paramecium</u> 977/2a</i> ”
Tia Silver	May 2005- Fall 2008 (NSHRF Student Award recipient) <u>MSc Thesis</u> : “ <i>Nucleomorph genome diversity in chlorarachniophyte algae</i> ”
Hameed Khan, Ph.D.	Summer 2004-Spring 2008 <u>Ph.D. Thesis</u> : “ <i>Diversity and evolution of mobile genetic elements in the nuclear and organellar genomes of cryptophyte algae</i> ”

Undergraduate Students

Meagan Adams	2018-present, Honours student (Biology)
Cedric Blais	2018-present, Honours student (History of Science and Technology, University of King’s College)
Emma Blanche	2018, co-op student
Elizabeth Woolaver	2018-19, undergraduate research volunteer
Morgan Colp	2016-17, co-op and Honours student (recipient of NSERC USRA)
Michael McPhee	2015-16, experiential, summer, and Honours student
Amanda Stanton	2014-15, summer student (recipient of NSERC USRA)
Shannon Sibbald	2014-15, summer and Honours student
Louis Martin	2014-15, summer and Honours student (recipient of NSERC USRA)
Vojtech David	2013, summer student
Rebecca Gibeault	2010-11, Honours student
Katherine Richman	2010-11, Honours student
James Giffin	Summer research volunteer
Tyler Mills	2009-10, summer and Honours student
Matthew MacDowell	2008-09, Honours student
Zach Fitzsimmons	2007-08, Honours student
Natalie Parks	2006-07, Honours student (recipient of NSERC USRA (declined) and winner of 2007 University Medal in Biochemistry & Molecular Biology)
Krystal van den Heuvel	2005-07, summer and Honours student (recipient of NSERC USRA for summer 2005 and summer 2006, recipient of 2005/06 <i>W. Andrew MacKay Alumni Scholarship</i>)
Kyle Phipps	2005-06, summer and Honours student
Melissa MacKinnon	2004-05, summer and Honours student

Research Technicians and Lab Managers

Marlena Dlutek	Fall 2007–Present
Katrin Sommerfeld	Fall 2007-summer 2010
Anna Fong	Winter 2004–Fall 2007

Research Assistants

Krista Jager	September 2018 - present
Shannon Sibbald	September-December 2017
Jesssica Johnson-Mackinnon	May 2013-December 2013
Robert Eveleigh	January 2012–April 2012
Naoko Tanifuji	January 2009-August 2013
Tia Silver	January 2009–April 2009
Robert Eveleigh	May 2008–August 2008
Christa Moore	April 2008–August 2008

High School Student Job Shadows

Matt Hood	July-August, 2008, Sackville High School
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Alex Sisley
Matthew Ponsford

January 13, 2006, J. L. Ilsley High School
November 26, 2004, J. L. Ilsley High School