Jan Janouškovec

Area of study: Evolution, Microbes, Coral reefs

EDUCATION & RESEARCH

- **Postdoctoral Fellow**. San Diego State University. USA (F.L. Rohwer) — **2014** Jan - present
- **Postdoctoral Fellow**. University of British Columbia. Canada (P.J. Keeling) — **2013** Aug - **2013** Dec
- **PhD (Botany)**. University of British Columbia. Canada (P.J. Keeling) — **2008** May - **2013** Jul
  Topic: Free-living alveolates and the evolution of apicomplexan parasites
- **Research Assistant**. Biology Centre, Academy of Sciences. Czech Rep. (J. Lukeš) — **2008** Feb - **2008** Apr
- **Research Assistant**. University of Glasgow. UK (S. Muller) — **2007** Sep - **2007** Dec
- **MSc (Molecular biology)**. University of South Bohemia. Czech Rep. (M. Oborník) — **2005** Sep - **2008** Jan
  Topic: The plastid of Chromera velia, the photosynthetic relative of Apicomplexa
- **BSc (Biology)**. University of South Bohemia. Czech Rep. (J. Zrzavý) — **2001** Sep - **2005** May
  Topic: The evolutionary position of bryozoans and the phylogeny of annelids

AWARDS

• **Governor General Gold Medal**	GG/UBC	May **2014**
• **CIFAR Global Scholar Fellowship (2014-15)**	CIFAR	Nov **2012**
• **Four Year Fellowship for PhD students (2010-13)**	UBC	Sep **2009**
• **Faculty of Science Graduate Award**	UBC	Mar **2014**
• **Kit Malkin Scholarship**	UBC	Feb **2013**
• **Edith Ashton Memorial Scholarship**	UBC	Mar **2011**
• **Jahn-Bovee Award for Best Student Oral Presentation**	ISOP	Aug **2011**
• **CMDE Best Poster Presentation**	CMDE	May **2010**
• **Faculty of Science Graduate Award**	UBC	May **2009**

- **Conference Travel Awards:** PSA/ISOP 2011 meeting, Seattle, WA, USA • ISEP XVIII 2010 meeting, Kanazawa, Japan • SMBE 2007 meeting, Halifax, NS, Canada.

PUBLICATIONS

1. **Janouškovec, J.**, Tikhonenkov, D.V., Burki, F., Howe, A.T., Kolísko, M., Mylnikov, A.P., Keeling, P.J. (2014). Factors mediating plastid dependency and the origins of parasitism in apicomplexans and their close relatives. *Proceedings of the National Academy of Science of the United States of America,* doi: 10.1073/pnas.1423790112
2. Flegontov, P., Michálek, J., **Janouškovec, J.**, Lai, D.-H., Jirků, M., Hajdušková E., Tomčala A., Otto, T.D., Keeling, P.J., Pain, A., Oborník, M., Lukeš, J. (2015): Divergent mitochondrial respiratory chains in phototrophic relatives of apicomplexan parasites. *Molecular Biology and Evolution,* doi: 10.1093/molbev/msv021.
3. Kirby, W.A., Tikhonenkov, D.V., Mylnikov, A.P., **Janouškovec, J.**, Lax, G., Simpson, A.G. (2014): Characterisation of *Tulamoeba bucina* n. sp., an extremely halotolerant amoeboflagellate heterolobosean belonging to the *Tulamoeba-Pleurostomum* clade (Tulamoebidae n. fam.). *Journal of Eukaryotic Microbiology,* doi: 10.1111/jeu.12172.

4. Mikhailov, K.V., **Janouškovec, J.**, Tikhonenkov DV, Mirzaeva, G.S., Diakin, A.Y., Simdyanov, T.G., Mylnikov, A.P., Keeling, P.J., Aleoshin, V.V. (2014). A complex distribution of elongation family GTPases EF1A and EFL in basal alveolate lineages. *Genome Biology and Evolution* 6(9):2361–2367.

5. Tikhonenkov, D.V., **Janouškovec, J.**, Mylnikov, A.P., Mikhailov, K.V., Simdyanov, T.G., Aleoshin, V.V., Keeling, P.J. (2014). Description of *Colponema vietnamica* sp.n. and *Acavomonas peruviana* n. gen. n. sp., two new alveolate phyla (Colponemidia nom. nov. and Acavomonidia nom. nov.) and their contributions to reconstructing the ancestral state of alveolates and eukaryotes. *PLoS One* 9(4):e95467.

6. **Janouškovec, J.***, Tikhonenkov, D.V.*, Mikhailov, K.V., Mylnikov, A.P., Simdyanov, T.G., Aleoshin, V.V., Keeling, P.J. (2013). Colponemids represent multiple ancient alveolate lineages. *Current Biology* 23:1–7.

7. Pombert J.-F., Smirnov, A., James, E.R.**, Janouškovec, J.**, Gray, M.W., Keeling, P.J. (2013). The complete mitochondrial genome from an unidentified *Phalansterium* species. *Protist Genomics* 1:25–32

8. **Janouškovec, J.***, Sobotka, R.*, Lai, D.-H.*, Flegontov, P., Koník, P, Komenda, J, Ali, S., Prášil, O., Pain, A., Oborník, M., Lukeš, J., Keeling, P.J. (2013). Split photosystem protein, linear-mapping topology and growth of structural complexity in the plastid genome of *Chromera velia*. *Molecular Biology and Evolution* 30(11):2447–2462. *Authors contributed equally.

9. **Janouškovec, J.**, Liu, S.-L., Martone, P.T., Carré, W., Leblanc, C., Collén, J., Keeling, P.J. (2013) Evolution of red algal plastid genomes: ancient architectures, introns, horizontal gene transfer and taxonomic utility of plastid markers. *PLoS One* 8(3):e59001.

10. Pombert, J.-F., James, E.R., **Janouškovec, J.**, Keeling, P.J.. 2012. Evidence for transitional stages in the evolution of euglenid group II introns and twintrons in the *Monomorphina aenigmatica* plastid genome. *PLoS ONE* 7:e53433.

11. **Janouškovec, J.**, Horák, A., Barott, K.L., Rohwer, F.L., Keeling, P.J. (2012) Environmental distribution of coral-associated relatives of apicomplexan parasites. *The ISME Journal* 7:444-7.

12. Worden, A.Z., **Janouškovec, J.**, Engman, A., McRose, D., Welsh, R.M., Malfatti, S., Tringe, S.G., Keeling, P.J. (2012) Global distribution of a marine alga revealed by targeted metagenomics. *Current Biology* 22(17):R675-7.

13. **Janouškovec, J.**, Horák, A., Barott, K.L., Rohwer, F.L., Keeling, P.J. (2012) Global analysis of plastid diversity reveals apicomplexan-related lineages in coral reefs. *Current Biology* 22(13):R518–9.

14. Barott, K.L., Rodriguez-Brito, B., **Janouškovec, J.**, Marhaver, K., Smith, J.E., Keeling, P., Rohwer, F.L. (2011) Microbial diversity associated with four functional groups of benthic reef algae and the reef-building coral *Montastraea annularis*. *Environmental Microbiology* 13:1192–1204.

15. Botté, C.Y., Yamaryo-Botté, Y., **Janouškovec, J.**, Rupasinghe, T., Keeling, P.J., Crellin, P., Coppel, R.L., Maréchal, E., McConville, M.J., McFadden, G.I. (2011) Identification of plant-like galactolipids in *Chromera velia*, a photosynthetic relative of malaria parasites. *Journal of Biological Chemistry* 286:29893–903.

16. Koblížek, M., **Janouškovec, J.**, Oborník, M., Johnson, J.H., Ferriera, S., Falkowski, P.G. (2011) Genome sequence of the marine photoheterotrophic bacterium *Erythrobacter* sp. strain NAP1. *Journal of Bacteriology* 193:5881–2.

17. Oborník, M., Vancová, M., Lai, D.-H., **Janouškovec J.**, Keeling, P.J., Lukeš, J. (2011) Morphology and ultrastructure of multiple life cycle stages of the photosynthetic relative of apicomplexa, *Chromera velia*. *Protist* 162:115–30.

18. Kořený, L., Sobotka, R., **Janouškovec, J.**, Keeling, P.J., Oborník, M. (2011) Tetrapyrrole synthesis of photosynthetic chromerids is likely homologous to the unusual pathway of apicomplexan parasites. *Plant Cell* 23:3454–62.

19. **Janouškovec, J.**, Horák, A., Oborník, M., Lukeš, J., Keeling, P.J. (2010) A common red algal origin of the apicomplexan, dinoflagellate, and heterokont plastids. *Proceedings of the National Academy of Science of the United States of America* 107:10949–54.

20. Zrzavý, J., Říha, P., Piálek, L., **Janouškovec, J.** (2009) Phylogeny of Annelida (Lophotrochozoa): total-evidence analysis of morphology and six genes. *BMC Evolutionary Biology* 9:189.

21. Oborník, M., **Janouškovec, J.**, Chrudimský, T., Lukeš, J. (2009) Evolution of the apicoplast and its hosts: from heterotrophy to autotrophy and back again. *International Journal for Parasitology* 39:1–12.

22. Moore, R.B., Oborník, M., **Janouškovec, J.**, Chrudimský, T., Vancová, M., Green, D.H., Wright, S.W., Davies, N.W., Bolch, C.J.S., Heimann, K., Šlapeta, J., Hoegh-Guldberg, O., Logsdon, J.M., Carter, D.A. (2008) A photosynthetic alveolate closely related to apicomplexan parasites. *Nature* 451:959–63.

*Authors contributed equally

EXPERIENCE & TEACHING

- **11 talks at international meetings (2 invited*):** Chromera II 2014*, Ceske Budejovice, Czech Republic ● CIFAR-IMB 2014, Liblice, Czech Republic ● ICOP 2013, Vancouver, BC, Canada (2x) ● NWAS 2012, Vancouver, BC, Canada ● PSA/ISOP 2011, Seattle, WA, USA ● ISEP 2010, Kanazawa, Japan ● CIFAR-IMB 2009, Asilomar, CA, USA ● Protist 2008, Halifax, NS, Canada ● ISP 2008*, Tsukuba, Japan ● SMBE 2007, Halifax, NS, Canada
- **2 posters at international meetings:** CSM 2012 Vancouver, BC, Canada ● ISEP 2006 Wroclaw, Poland.
- **18 invited manuscript reviews:** *Proceedings of the National Academy of Science of the United States of America* (2x) ● *Molecular Biology and Evolution* (5x) ● *Genome Biology and Evolution* (2x) ● *PLOS One* (2x) ● *Protist* (1x) ● *Molecular Genetic Elements* (1x) ● *International Journal of Molecular Sciences* (1x) ● *Acta Societatis Botanicorum Poloniae* (2x) ● *Journal of Phycology* (2x)
- **4 workshops:** Genomics ● Transcriptomics ● Big data ● Tree of life
- **CIFAR Global Academy:** Training in international research leadership including three meetings with other fellows focused on promoting interdisciplinary research and communicating science (2012-15)
- **Teaching assistant:** University of British Columbia, Canada. BIOL 332 (Protistology; 2010)
- **Instructional Skills Workshop** and **Instructional Skills Program for International Teaching Assistants**. University of British Columbia, Canada (2008)
- **Certificate, Biology teaching for high schools**. 4 semesters of 12 classes + 30 hours of teaching practice at a high school. Univ. of South Bohemia, Czech Republic (2005-2008)
- **Science community:** Volunteer work at ICOP 2013 Meeting, Vancouver, BC, Canada ● Member of International Society of Protistologists: 2008, 2010-2015 ● Member of International Society for Evolutionary Protistology: 2010-2014 ● Member of Society for Molecular Biology and Evolution: 2007