

Curriculum Vitae

Fredric Vincent Vencl

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The Smithsonian Tropical Research Institute
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Education

Ph. D., State University of New York at Stony Brook (1977)
M.A., State University of New York at Stony Brook (1975)
B.A., Hiram College, Hiram, Ohio (1972)

Honors, Awards and Grants

National Science Foundation DEB 0108213 (2001-2005) \$533,895
Andrew W. Mellon Foundation Grant for Exploratory Research (1996) \$3000
Chapman Memorial Fund Grant, American Museum of Natural History (1977) \$1000
Invited Participant. Organization for Tropical Studies Field Ecology Course. Costa Rica
(1976)
Graduate Council Fellow. S.U.N.Y. at Stony Brook (1972-1974)
Magna Cum Laude, Dept. Honors in Art and Biology. Hiram College (1972)
Phi Beta Kappa

Professional experience

1999-present Research Associate Professor. Department of Ecology and Evolution. Stony Brook University.

1997-present Research Associate. The Smithsonian Tropical Research Institute, Panamá

1996-1998 Research Assistant Professor. Department of Neurobiology and Behavior. The State University of New York at Stony Brook.

1992-1996 Adjunct Assistant Professor. Department of Neurobiology and Behavior. The State University of New York at Stony Brook.

Publications

Vencl FV & Srygley RB (2013) Proximate effects of maternal oviposition preferences on defense efficacy and larval survival in a diet-specialized tortoise beetle: who knows best - mothers or their progeny? *Ecol. Entomol* DOI: 10.1111/een.12052
Vencl FV & Srygley RB (2013) Enemy targeting, trade-offs, and the evolutionary assembly of a tortoise beetle defense arsenal. *Evo. Ecol.* 27: 237-252. DOI

10.1007/s10682-012-9603-1

- Vencl FV, Shah S, Gerber A & Carlson AD (2012) Octopamine and DUM neurons orchestrate the larval firefly aposematic defense: a “Key Innovation”? In: Kirton LG, Lim GT & Day JD (eds). Proceedings of the Second International Firefly Symposium, Selangor, Malaysia. *Lampyrid* 2: 99-112
- Vencl FV, Trillo PA & Geeta R (2011) Functional interactions among tortoise beetle larval defenses reveal trait suites and escalation. *Behav. Ecol. Sociobiol.* 65(2): 227-239. DOI 10.1007/s00265-010-1031-z
- Vencl FV, Gómez NE, Ploss K & Boland W (2009) The chlorophyll catabolite, pheophorbide *a*, confers predation resistance in a larval tortoise beetle shield defense. *J. Chem. Ecol.* 35(3): 281-288. DOI: 10.1007/S10886-008-9577-1 and cover
- Fu XH, Vencl FV, Ohba N, Meyer-Rochow VB, Lei C & Zhang Z (2007) Structure and function of the larval eversible glands of the aquatic firefly *Luciola leii* (Coleoptera: Lampyridae). *Chemoecology* 17: 117-124
- Fu XH, Ohba N, Vencl FV & Lei C (2006) Life cycle and behavior of the aquatic firefly, *Luciola leii* (Coleoptera: Lampyridae), from Mainland China. *Can. Entomol.* 138(6): 860-870
- Vencl FV & Allen BJ (2006) Failure-time analysis of the effectiveness of larval shield defenses and the evolution of dietary specialization in tortoise beetles (Chrysomelidae: Hispinae). *Bonner zool. Beitraege* 54: 287-295
- Aiello A & Vencl FV (2006) One plant, two herbivore strategies: *Lema insularis* (Chrysomelidae: Criocerinae) and *Acorduloceridea compressicornis* (Pergidae: Acordulocerinae) on *Dioscorea mexicana* (Dioscoreaceae), with observations on A *Lema* co-mimic. *J. N.Y. Entomol Soc* 114: 144-156
- Vencl FV, Nogueira-de-Sa F, Allen BJ, Windsor DM & Futuyma DJ (2005) Dietary specialization influences the efficacy of larval tortoise beetle shield defenses. *Oecologia* 145(3): 409-414
- Fu XH, Ohba N, Vencl FV & Lei C (2005) Structure, behavior, and the life cycle of an aquatic firefly, *Luciola substriata*, in China. *Can. Entomol.* 137: 83-90
- Vencl FV (2004) Allometry and proximate mechanisms of sexual selection in *Photinus* fireflies and some other beetles. *Integr. Comp. Biol.* 44: 242-249
- Vencl FV, Morton TC, Mumma RO & Schultz JC (1999) The shield defense of a larval tortoise beetle. *J. Chem. Ecol.* 25: 549-566
- Vencl FV & Morton TC (1998) The fecal shield defense of the sumac flea beetle, *Blepharida rhois* (Chrysomelidae: Alticinae). *Chemoecology* 8: 25-32
- Morton TC. & Vencl FV (1998) Larval leaf beetles form a defense from recycled host plant chemicals discharged in fecal wastes. *J. Chem. Ecol.* 24: 765-786
- Vencl FV & Carlson AD (1998) Proximate mechanisms of sexual selection in the firefly *Photinus pyralis* (Coleoptera: Lampyridae). *J. Insect Behav.* 11: 191-207
- Vencl FV & Aiello A (1997) A new species of leaf-mining *Oulema* from Panamá (Coleoptera: Chrysomelidae: Criocerinae). *J. N. Y. Entomol. Soc.* 105: 40-44
- Vencl FV, Blaschko B & Carlson AD (1994) Flash behavior of female *Photuris versicolor* fireflies (Coleoptera:Lampyridae) in simulated predatory and courtship dialogs. *J. Insect Behavior* 7: 843-858
- Vencl FV (1977) A case of signal convergence between primates and birds. *Am.*

Nat. 111: 777-782

Vencl FV & Soucek B (1976) Structure and control of duet singing in the white-crested laughing thrush (*Garrulax leucolophus*). *Behavior* 57: 206-226

Soucek B & Vencl FV (1975) Bird song study using digital computer. *J. theo. Biol.* 49: 147-172

Book Chapters and Published Symposia Contributions

Vencl FV & Leschen RAB (2013) Chapter 34.7. Criocerinae Lattreille 1807. pp. 67-87 *In:* Leschen RAB & Beutel RG (eds). *Handbook of Zoology, Coleoptera Volume 3: Morphology and Systematics (Phytophaga)*. Walter de Gruyter, Berlin. *in press*

Vencl FV (2009) Allometry, sexual selection in *Photinus* fireflies and the endangered day-flashing *sp. nov.* of Chucantí Panamá pp. 43-56 *In:* Napompeth B (ed), *Diversity and Conservation of Fireflies. Proceedings of the International Symposium on Diversity and Conservation of Fireflies*. National Biological Control Research Center, Bangkok, Thailand

Fu XH, Vencl FV, Ohba N, Meyer-Rochow VB, Lei C & Zhang Z (2009) Structure and function of the larval eversible glands of the aquatic firefly *Luciola leii* (Coleoptera: Lampyridae), pp. 66-80 *In:* Napompeth B (ed), *Diversity and Conservation of Fireflies. Proceedings of the International Symposium on Diversity and Conservation of Fireflies*. National Biological Control Research Center, Bangkok, Thailand

Vencl FV & Nishida K (2008) A new Gall-inducing Shining Leaf Beetle (Coleoptera: Chrysomelidae) from Thailand and its relevance to the evolution of herbivory in leaf-beetles, pp. 246-259 *In:* Jolivet P, Santiago-Blay J and Schmitt M (eds). *Research on Chrysomelidae*. Brill Academic Publishers, Leiden, The Netherlands

Vencl FV, Levy A, Geeta R, Keller G & Windsor DM (2004) Observations on the natural history, systematics, and phylogeny of the Criocerinae of Costa Rica and Panamá pp 423-454, *In:* Schmidt M, Jolivet P and Snatiago-Blay J (eds.) *New Developments in the Biology of Chrysomelidae*. SPB Academic Publishing, The Hague, The Netherlands

Vencl FV & Morton TC (1999) Macroevolutionary aspects of larval shield defenses. pp 217-238, *In:* Cox ML (ed.) *Advances in Chrysomelidae Biology*. Backhuys Publishers, Leiden, The Netherlands

Vencl FV & Morton TC (1999) Did change in shield defenses promote diversification in shining leaf beetles?, pp. 205-218 *In:* Biondi M, Daccordi M & Furth DG (eds.), *Proceedings of the Fourth International Symposium on the Chrysomelidae. XX International Congress of Entomology. Museo Regionale di Scienze Naturali, Torino, Italy*