

GEORGE AMATO
DIRECTOR AND AFFILIATED FACULTY
SACKLER INSTITUTE FOR COMPARATIVE GENOMICS

HIGHEST DEGREE EARNED

Ph.D.

AREA OF SPECIALIZATION

Conservation Genetics

EDUCATIONAL EXPERIENCE

Ph.D., M.S., M.Phil. Yale University, New Haven, CT 1993-94

B.S. University of Connecticut, Storrs, CT 1978

PREVIOUS EXPERIENCE IN DOCTORAL EDUCATION

FACULTY APPOINTMENTS

Adjunct Professor of Ecology, Evolution, and Environmental Biology,
Columbia University, 1995-present

Adjunct Professor of Biology, Fordham University, 1995-present

COURSES TAUGHT

Species Concepts. Yale Institute for Biospheric Studies. 2001

Genetics and Small Populations. Yale Institute for Biospheric Studies. 2003

Conservation Genetics. Yale Institute for Biospheric Studies. 2005

Conservation Genetics. Center for Environmental Research and Conservation, Columbia University, 2002-2007

GRADUATE ADVISEES

Mary Egan, Fordham University, 1999

Michael Russello, Columbia University, 2003

Evon Hekkala, Columbia University, 2003

Kari Schmidt, Columbia University, current

Anthony Caragiulo, Fordham University, current

GRADUATE COMMITTEES

Howard Rosenbaum, Yale University

Yael Wyner, Yale University

Phaedra Dukakis, Yale University

Eugenia Narro, Columbia University

Carl Gaines, Fordham University

Christina Castellano, Fordham University

Sergios Kolokotronis, Columbia University

Linda Gormezano, City University of New York

Christopher Nagy, City University of New York

Minh Le, Columbia University
Sebastian Kvist, RGGGS

RESEARCH GRANT SUPPORT

Alfred P. Sloan Foundation
Richard Lounsbery Foundation
Panthera Foundation
Disney Conservation Fund

RECENT ARTICLES IN REFEREED JOURNALS (2006-2011)

- Meredith, R.W., E. Hekkala, **G. Amato** and J. Gatesy. 2011. A phylogenetic hypothesis for *Crocodylus* (Crocodylia) based on mitochondrial DNA: Evidence for a trans-Atlantic voyage from Africa to the New World. *Molecular Phylogenetics and Evolution* (in press).
- Reid, B.N., W.P. McCord, J.B. Iverson, A. Georges, T. Bergman, **G. Amato**, R. DeSalle and E. Naro-Maciel. 2011. Comparing and combining distance-based and character-based approaches for barcoding turtles. *Molecular Ecology Resources* (in press).
- Hekkala, E., M.H. Shirley, **G. Amato**, J.D. Austin, S. Charter, J. Thorbjarnarson, K.A. Vliet, M.L. Houck, R. DeSalle and M.J. Blum. 2011. An ancient icon reveals ne mysteries: Mummy DNA resurrects a cryptic species within the Nile crocodile. *Molecular Ecology* (in press).
- Doukakis, P., R. Hanner, M. Shivji, C. Bartholomew, D. Chapman, E. Wong and **G. Amato**. 2011. Applying genetic techniques to study remote shark fisheries in northeastern Madagascar. *Mitochondrial DNA*. 2011; Early Online:1-6.
- Redford, K.H., **G. Amato**, J. Baillie, P. Beldomenico, E.L. Bennett, N. Clum, R. Cook, G. Fonseca, S. Hedges, F. Launay, S. Lieberman, G.M. Mace, A. Murayama, A. Putnam, J.G. Robinson, H. Rosenbaum, E.W. Sanderson, S.N. Stuart, P. Thomas and J. Thorbjarnarson. 2011. What does it mean to successfully conserve a (Vertebrate) species? *BioScience*. 61(1) 39-48.
- Russello, M.A., C. Stahala, D. Lalonde, K.L. Schmidt and **G. Amato**. 2010. Cryptic diversity and conservation units in the Bahama parrot. *Conservation Genetics*. 11(5)1809-1821.
- Lowenstein. J.H., J. Burger, C.W. Jeitner, **G. Amato**, S.O. Kolokotronis, and M. Gochfeld. 2010. DNA barcodes reveal species-specific mercury levels in tuna sushi that pose a health risk to consumers. *Biology Letters*. 6:692-695.
- Hekkala, E.R., **G. Amato**, R. DeSalle, and M.J. Blum. 2010. Molecular assessment of population differentiation and individual assignment potential of Nile crocodile (*Crocodylus niloticus*) populations. *Conservation Genetics*. 11:1435-1443.
- Naro-Maciel, E., B. Reid, N.N. FitzSimons, M. Le, R. DeSalle, and **G. Amato**. 2010. DNA Barcodes for globally threatened marine turtles: a registry approach to documenting biodiversity. *Molecular Ecology Resources*. 10:252-263.
- Dias, I.M.G., F.C. Almeda, **G. Amato**, R. DeSalee, and C.G. Fonseca. 2010. Delineating geographic boundaries of the woolly mouse opossum, *Micoureus demerarae* and *Micoureus paraguayanus* (*Didelphimorphia: Diphelidae*) *Conservation Genetics Resources*. 11:1579-1585.

- Eaton, M.J., G.L. Meyers, S.O. Kolokotronis, M.S. Leslie, A.P. Martin, and **G. Amato**. 2010. Barcoding bushmeat: molecular identification of Central African and South American harvested vertebrates. *Conservation Genetics*. 11:1389-1404.
- Ye, C., X. Wu, P. Yan, and **G. Amato**. 2009. B-Keratins in crocodiles reveal amino acid homology with avian keratins. *Mol. Biol. Rep.* 37:1169-1174.
- Eaton, M.J., A. P. Martin, J. Thorbjarnarson, and **G. Amato**. 2009. Species-level diversification of African dwarf crocodiles (Genus *Osteolaemus*): a geographic and molecular phylogenetic perspective. *Molecular Phylogenetics and Evolution* 50(3) 496-506.
- Lowenstein, J.H., **G. Amato**, and S.O. Kolokotronis. 2009. The real maccoyii: Identifying tuna sushi with DNA Barcodes – Contrasting characteristic attributes and genetic distances. *PloS ONE* 4(11): e7866.
- Dias, I.M.G., **G. Amato**, H.M. Cunha, R. DeSalle, A.P. Paglia, J.K. Peterson, and C.G. Fonseca. 2009. Isolation, characterization and cross-species amplification of new microsatellite markers for three opossum species of the *Didelphidae* family. *Conservation Genetics Resources*. 1:405-410.
- Genome 10K Community of Scientists. 2009. Genome 10K: A proposal to obtain whole-genome sequence for 10,000 vertebrate species. *Journal of Heredity*. 100(6):659-674.
- Castellano, C.M., J.L. Behler, and **G. Amato**. 2009. Genetic diversity and population genetic structure of the Wood Turtle (*Glyptemys insculpta*) at Delaware Water Gap National Recreation Area, USA. *Conservation Genetics*. 10:1783-1788.
- Naro-Maciel, E., M. Le, N.N. FitzSimmons, and **G. Amato**. 2008. Evolutionary relationships of marine turtles: A molecular phylogeny based on nuclear and mitochondrial genes. *Molecular Phylogenetics and evolution*
- Gatesy, J. and G. Amato. 2008. The rapid accumulation of consistent molecular support for intergeneric crocodylian relationships. *Molecular Phylogenetics and Evolution*. DOI: 10.1016/j.ympev.2008.02.009.
- Deem, S.L., E. Ladwig, Cray, C., Karesh, W.B., and G. Amato. 2008. Health assessment of the ex situ population of St. Vincent parrots (*Amazona guildingii*) in St. Vincent and the Grenadines. *Journal of Avian Medicine and Surgery* 22(2):114-122.
- Dias, I.M.G., G. Amato, M.R.S. Carvalho, H.M. Cunha, A.P. Paglia, R. DeSalle, and C.G. Fonseca. 2007. Characterization of eight microsatellite loci in the wolly mouse opossum, *Micoureus paraguayanus*, isolated from *Micoureus demerarae*. *Molecular Ecology Notes* 2007.
- Russello, M.A. and G. Amato. 2007. On the horns of a dilemma: molecular approaches refine ex situ conservation in crisis. *Molecular Ecology* 12, 2405-2406.
- Ji, Xue-Feng, WU Xiao-Bing, YAN Peng, G. Amato. 2007. Complete sequence and gene organization of the mitochondrial genome of Siamensis crocodile (*Crocodylus siamensis*). *Molecular Biology Reports*. Springer 0301-4851.
- LI Y, Wu XB, Yan P, and G. Amato. 2007. The complete mitochondrial genome of the salt-water crocodile (*Crocodylus porosus*) and phylogeny of crocodiles. *Journal of Genetics and Genomics*. 34(2):119-128.
- Kretzman, M., L. Mentzer, R. DiGiovanni, M. Leslie, and G. Amato. 2006. Microsatellite

diversity and fitness in stranded juvenile harp seals (*Phoca groenlandica*). *Journal of Heredity* 2006:97 (6):555-560.

Ji, Xue-Feng, WU Xiao-Bing, LI Yan, YAN Peng, G. Amato. 2006. The mitochondrial genome of *Crocodylus niloticus* with implications for phylogenetic relationships among crocodylians. *Acta Zoologica Sinica* 52(4):810-818.