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**PROFESSIONAL EXPERIENCE**

**Stanford University, Stanford, CA**

- *Instructor*, Department of Otolaryngology-HNS, 10/09-present.
- *Assistant Professor (Consulting)*, Department of Otolaryngology-HNS, 9/07-10/09.
- *Collaborating Scientist*, Center for Conservation Biology, Department of Biological Sciences, 1/02-present.
- *Lecturer*, Science Writing, Continuing Studies Program/New York Times Knowledge Network, 3/08-present.
- *Research Associate*, Department of Otolaryngology, 4/05-8/07.

**Utopia Scientific, San Diego, CA**

- *Co-founder/CEO* of Utopia Scientific, a 501(c) (3) non-profit corporation dedicated to science and public health education, 10/2002-present.

**Hnu Photonics/Medical, Wailuku, HI**

- *Scientific consultant*, 1/00-present.

**EDUCATION AND TRAINING**

**Stanford University, Stanford, CA**

- *Postdoctoral Fellow*, Department of Pediatrics/Hansen Experimental Physics Laboratory/Department of Geophysics, 10/03-3/05.
- *Postdoctoral Fellow*, Department of Pediatrics/Hansen Experimental Physics Laboratory, 11/00-11/03.
- *Visiting Scholar*, Center for Conservation Biology, 1/00-12/01.

**University of California, Davis, CA**

- *Doctor of Philosophy* in Ecology, Department of Population Health and Reproduction, School of Veterinary Medicine 9/95-3/00.

**University of Hawaii at Manoa, Honolulu, HI**

- *Master of Science* in Ecology, Evolution & Conservation Biology, Department of Entomology, 1/89-12/91.

**Fairfield University, Fairfield, CT**

- *Bachelor of Science* in Biology, Minor in French and Art History, 9/83-5/87.

**HONORS**

- Distinguished Young Alumna Award, University of California, Davis, 10/07.

**FUNDING AWARDS**

- Stanford University Faculty mentor grant [\$6,100], 1-8/11; 5-9/10, [\$6,900], 3-9/09; [\$5,200], 4-12/08; student mentored field grant [\$5,200/yr], 6-7/05-10.
- Scheide Fund elephant social structure research [\$5,000], 1/08-12/08.
- Seaver Institute Elephant vibrotactile communication research [\$225,000], 12/04-3/07.
- Falconwood Corporation: Coral Reef Restoration Grant, Guana Island, BVI [\$9,000], 11/05-8-07.
- Oakland Zoo Conservation Fund elephant field grant and hormone analysis [\$25,000], 6/04-09.
- National Institute of Health (NIH) loan repayment program for Pediatric Research on vibrotactile sensitivity [\$12,000], 7/04-06.

- Stanford Bio-X Interdisciplinary Award for elephant vibrotactile research [\$145,000], 9/02-12/04.
- McCormick Women in Biomedical Sciences Fellowship/Travel Award [\$16,000], 9/02-3.
- Department of Pediatrics Research and Development award [\$35,000], 9/02-3.
- Morrison Institute of Population and Resource Studies Field Grant [\$10,500], 6-7/02.
- US Fish and Wildlife Service African Elephant Research Fund Grant #982102-G285 [\$24,000] 6-12/02, [\$15,000] 6-12/03.
- National Geographic Research and Exploration Grant #7205-02 [\$19,996], 6-8/02.
- NSF-SBIR/STTR Phase I: Near Field Intra-cellular Microscope #0109865 [\$100,000], 7/01-7/02.
- Falconwood Corporation: Flamingo Reintroduction Grant, Guana Island, BVI [\$5,000] 7/01, 3/04 [\$5,000], 10/05 [\$8,000].
- Woods Hole Field Travel Grant, Berlin, Germany [\$1,000], 9-10/00.
- Rotary International Elephant/Human Conflict Technical Field Grant, Nagarhole, India [\$20,000], 8/01 and 10/00.
- TRAFFIC East Asia ivory policy grant, Beijing, China [\$25,000], 1-9/00.

#### BEHAVIOR/ECOLOGY/CONSERVATION PUBLICATIONS

1. **O'Connell-Rodwell CE**, Wyman M, Wood JD, Redfield S, Puria S, Hart LA. (*submitted*). Antiphonal vocal bouts facilitate group departures in free-ranging African elephants (*Loxodonta africana*). *Bioacoustics*.
2. **O'Connell-Rodwell CE**, Wood JD, Kinzley C, Rodwell TC, Alarcon C, Wasser SK, Sapolsky R. (2011) Male African elephants (*Loxodonta africana*) queue when the stakes are high. *Ethol. Ecol. & Evol.* DOI:10.1080/03949370.2011.598569
3. Thurber MI, **O'Connell-Rodwell CE\***, Turner WC, Nambandi K, Kinzley C, Rodwell TC, Faulkner CT, Felt SA & Bouley DM. 2011. Effects of Rainfall, Host Demography, and Musth on Strongyle Fecal Egg Counts in African Elephants (*Loxodonta africana*) in Namibia. *J. Wild. Disease.* **47(1)**: 172-181.
4. Forrester G, **O'Connell-Rodwell CE**, Baily P, Giovannini S, Harmon L, Karis R, Krumholz J, Rodwell T, Jarecki L. 2011. Testing an approach to ecological restoration: transplanting endangered Elkhorn corals in the Virgin Islands. *Restor. Ecol.* 9(3): 299-306.
5. **O'Connell-Rodwell CE**, Wood JD, Kinzley C, Rodwell TC, Poole JH, Puria S. 2007. Wild African elephants (*Loxodonta africana*) discriminate seismic alarm calls of familiar versus unfamiliar conspecifics. *J. Acoust. Soc. Amer.* **122(2)**: 823-830.
6. **O'Connell-Rodwell CE**. 2007. Keeping an 'ear' to the ground: seismic communication in elephants. *Physiol.* **22**: 287-294.
7. Bouley DM, Alarcon C, Hildebrandt T, **O'Connell-Rodwell CE\***. 2007. The distribution, density and three dimensional histomorphology of Pacinian Corpuscles in the Asian elephant (*Elephas maximus*) foot and their potential role in detecting seismic information. *J. Anat.* **211(4)**: 428-435.
8. **O'Connell-Rodwell CE**, Wood JD, Rodwell TC, Shriver D, Puria S, Partan SR, Keefe, R, Arnason BT, Hart LA. 2006. Wild elephant (*Loxodonta africana*) breeding herds respond to artificially transmitted seismic stimuli. *Behav. Ecol. & Sociobiol.* **59(6)**:842-850.
9. Wood JD, **O'Connell-Rodwell CE**, Klemperer S. 2005. Using seismic sensors to detect elephants and other large mammals: a novel censusing technique for wildlife managers. *J. Appl.Ecol.* **42**: 587-594.
10. Gunther R, **O'Connell-Rodwell, CE\***, Klemperer S. 2004. Seismic waves from elephant vocalizations: a possible communication mode? *Geophys. Res. Lett.* **31**, L11602, p.1-4.
11. **O'Connell-Rodwell CE**, Rojek N, Rodwell TC, Shannon P. 2004. Artificially induced group display and nesting behaviors in the reintroduced population of Caribbean flamingos (*Phoenicopterus ruber ruber*) on Guana Island, BVI. *Bird Conserv. Int'l.* **14**:55-62.
12. Arnason BT, Hart LA, **O'Connell-Rodwell CE**. 2002. The properties of geophysical fields and their effects on elephants and other animals. In: Revisiting the Umwelt: Animal communication in the context of its environments. *J. Comp. Psychol.*, **116(2)**.
13. **O'Connell-Rodwell CE**, Hart LA, Arnason B. 2001. Exploring the potential use of seismic waves as a communication channel by elephants and other large mammals. *Amer. Zool.* **41(5)**: 1157-1170.
14. **O'Connell-Rodwell CE**, Arnason B, Hart LA. 2000. Seismic properties of Asian elephant (*Elephas maximus*) vocalizations and locomotion. *J. Acoust. Soc. Amer.* **108(6)**: 3066-3072.

15. **O'Connell-Rodwell CE**, Rodwell T, Rice M, Hart L. 2000. The modern conservation paradigm: Can agricultural communities co-exist with elephants? (Five-year case study in East Caprivi, Namibia). *Biol. Conserv.* **93**:381-391.
16. **O'Connell CE**, Hart LA, Arnason B. 1999. Response to "Elephant hearing". *J. Acoust. Soc. Amer.* **105**, 2051-2052.
17. Hanley KA, Biardi JE, Greene CM, Markowitz TM, **O'Connell CE**, Hornberger JH. 1996. The behavioral ecology of host-parasite interactions: a interdisciplinary challenge. *Parasitology Today* **12 (10)**: 371-373.

#### SELECTED MEDICAL PUBLICATIONS

1. Hundt W, Steinbach S, Burbelko M, Kiessling A, Rominger M, **O'Connell-Rodwell CE**, Mayer D, Bednarski MD, Guccione S. 2011. Induction of Luciferase Activity under the Control of an hsp70 Promoter Using High-Intensity Focused Ultrasound: Combination of Bioluminescence and MRI Imaging in Three Different Tumour Models. *Technol. Cancer Res. Treat.* **10(2)**:197-210.
2. **O'Connell-Rodwell CE**, Macanos MA, Simanovskii D Cao YA, Bachmann MH, Schwettman, HA & Contag, CH. 2008. In vivo analysis of Hsp70 induction following pulsed laser irradiation in a transgenic reporter mouse. *J. Biomed. Optics.* **3(3)**: 030501-3.
3. Kruse DE, Mackanos MA, **O'Connell-Rodwell CE**, Contag CH, Ferrara KW. 2008. Short duration-focused ultrasound stimulation of Hsp70 expression in vivo. *Phys Med Biol.* **53(13)**: 3641-60.
4. Hundt W, **O'Connell-Rodwell CE**, Bednarski MS, Steinbach S, Guccione S. 2007. In vitro effect of focused ultrasound or thermal stress on HSP70 expression and cell viability in three tumor cell lines. *Academ. Radiol.* **14(7)**: 859-870.
5. **O'Connell-Rodwell CE**, Shriver D, Simanovskii DM, McClure C, Cao Y, Zhang W, Bachmann MH, Beckham JT, Jansen ED, Palanker D, Schwettman HA, Contag CH. 2004. A genetic reporter of thermal stress defines physiologic zones over a defined temperature range. *FASEB.* **18**: 264-271.
6. **O'Connell-Rodwell CE**, Burns SM, Bachmann MH, Contag CH. 2002. Bioluminescent indicators for in vivo measurements of gene expression. *Trends Guide to Imaging Technologies: Trends in Biotechnology* **20(8)** (Suppl.)S1-S5.

#### ACADEMIC BOOKS

1. **O'Connell-Rodwell CE.** (ed) (2010). The Use of Vibrations in Communication: properties, mechanisms and function across taxa. Research Signpost.

#### POPULAR BOOKS

1. O'Connell, C. E. (2007) *"The Elephant's Secret Sense"*. Free Press (Simon & Schuster).
2. O'Connell, C. E. & Jackson, D. (2011) *"The Elephant Scientist"* Houghton Mifflin Children's Books.
3. O'Connell, C. E. (2011) *"An Elephant's Life"*. Lyons Press.

#### BOOK AWARDS

Outstanding Science Trade Book award 2012  
Junior Library Guild Selection 2011

#### RESEARCH IN THE MEDIA (last 6 years)

- 2006: *BBC* 2/06, *Natural History*, 5/06, *National Geographic* & *PBS Wild Chronicles* 9&10/06, *National Geographic Magazine* 10/06, *Chronicles of Higher Education*, 11/06.
- 2007: *Discovery Channel*, 5/07, *Africa Geographic Magazine*, 3/07, *Discover Magazine*, 3/07; 9/07, *Science News* 4/07, *San Francisco Chronicle*, 5/07, *FOX Channel 2*, 5/07, *KPBS* 5/07, *Boston Globe*, 6/07, *Baltimore Sun*, 6/07, *BBC World Service*, 6/07, *CBC*, 6/07, *NPR* 6/07, *Seattle Times*, 7/07, *National Geographic online*, 8/07, *Audubon Magazine*, 11/07.
- 2008: *Travel Africa*, 4/08, *Fairfield University Alumni Magazine*, 6/08.
- 2009: *BBC Online news* 2/09; *National Geographic Online news* 2/09; *The Writer Magazine*, 8/09; *Stanford Alumni Magazine*, 9/09; *Amer Physiol Soc Online* 9/09; *ABCNews.com* 9/09.
- 2010: *California Academy of Sciences Science in Action* 5/10; *National Geographic Magazine* 6/10; *Highlights Magazine* 9/10; *Smithsonian Magazine cover article* 11/10.
- 2011: *Science Year* 2/11; *NTY Scientist at Work Blog* 6 entries 7-9/2011; *Washington Post* 11/11, *Africa Geographic Magazine feature article* 12/11; *O Magazine "5 Things I Know"* 12/11. *USA Today* 12/11.
- 2012: *Smithsonian Magazine feature article* 11/12; *Highlights Magazine* 4/12.