

## Publikationer

### **Vocal state change through laryngeal development**

Zhang, Y. S., Takahashi, D. Y., Liao, D. A., Ghazanfar, A. A. & Elemans, C. P. H., 1. dec. 2019, I : Nature Communications. 10, 1, 4592.

### **Vocal Motor Performance in Birdsong Requires Brain-Body Interaction**

Adam, I. & Elemans, C. P. H., 10. jun. 2019, I : eNeuro. 6, 3, 6 s.

### **The return to water in ancestral *Xenopus* was accompanied by a novel mechanism for producing and shaping vocal signals**

Kwong-Brown, U., Tobias, M. L., Elias, D. O., Hall, I. C., Elemans, C. P. & Kelley, D. B., 8. jan. 2019, I : eLife. 8, s. 1-15 e39946.

### **Quantifying syringeal dynamics in vitro using electroglottography**

Rasmussen, J. H., Herbst, C. T. & Elemans, C. P. H., 23. aug. 2018, I : The Journal of Experimental Biology. 221, 16, s. 1-12

### **High-fidelity fluid-structure interaction modeling of bird vocalization in syrinx**

Jiang, W., Xue, Q., Zheng, X., Rasmussen, J. H. & Elemans, C. P. H., 2018, *2018 AIAA Aerospace Sciences Meeting*. American Institute of Aeronautics and Astronautics Inc. (AIAA), 2018-0578

### **The last common ancestor of animals lacked the HIF pathway and respired in low-oxygen environments**

Mills, D. B., Francis, W. R., Vargas, S., Larsen, M., Elemans, C. P. H., Canfield, D. E. & Wörheide, G., 2018, I : eLife. 7, e31176.

### **In situ vocal fold properties and pitch prediction by dynamic actuation of the songbird syrinx**

Düring, D. N., Knörlein, B. J. & Elemans, C. P. H., 12. sep. 2017, I : Scientific Reports. 7, 14 s., 11296.

### **Fundamental frequency control in the songbird syrinx *in vitro***

Maxwell, A., Düring, D. & Elemans, C., 22. maj 2017. 1 s.

### **Fundamental constraints in synchronous muscle limit superfast motor control in vertebrates**

Mead, A. F., Osinalde, N., Ørtenblad, N., Nielsen, J., Brewer, J., Vellema, M., Adam, I., Scharff, C., Song, Y., Frandsen, U., Blagoev, B., Kratchmarova, I. & Elemans, C. P., 2017, I : eLife. 6, 20 s., e29425.

### **Motor control by precisely timed spike patterns**

Srivastava, K. H., Holmes, C. M., Vellema, M., Pack, A. R., Elemans, C. P. H., Nemenman, I. & Sober, S. J., 2017, I : Proceedings of the National Academy of Science of the United States of America. 114, 5, s. 1171-1176

### **Oilbirds produce echolocation signals beyond their best hearing range and adjust signal design to natural light conditions**

Brinkløv, S., Elemans, C. & Ratcliffe, J., 2017, I : Royal Society Open Science. 4, 12 s., 170255.

### **Plasticity in mitochondrial cristae density allows metabolic capacity modulation in human skeletal muscle**

Nielsen, J., Gejl, K. D., Hey-Mogensen, M., Holmberg, H-C., Suetta, C., Krstrup, P., Elemans, C. P. H. & Ørtenblad, N., 2017, I : The Journal of Physiology. 595, 9, s. 2839-2847

### **Mice produce ultrasonic vocalizations by intra-laryngeal planar impinging jets**

Mahrt, E., Agarwal, A., Perkel, D., Portfors, C. & Elemans, C. P. H., 10. okt. 2016, I : Current Biology. 26, 19, s. R880-R881

### **Embodied motor control of avian vocal production**

Düring, D. N. & Elemans, C., feb. 2016, *Vertebrate sound production and acoustic communication*. Suthers, R. A., Fitch, W. T., Fay, R. R. & Popper, A. N. (red.). Springer, Bind 53. s. 119-157 (Springer Handbook of Auditory Research, Bind 53).

**Semicircular canals circumvent Brownian Motion overload of mechanoreceptor hair cells**

Muller, M., Heeck, K. & Elemans, C. P. H., 2016, I : P L o S One. 11, 7, s. e0159427 15 s.

**Universal mechanisms of sound production and control in birds and mammals**

Elemans, C., Rasmussen, J. H., Herbst, C. T., Düring, D. N., Zollinger, S. A., Brumm, H., Srivastava, K., Svane, N., Ding, M., Larsen, O. N., Sober, S. J. & Svec, J. G., 27. nov. 2015, I : Nature Communications. 6, 13 s., 8978.

**Multifunctional and context-dependent control of vocal acoustics by individual muscles**

Srivastava, K. H., Elemans, C. P. H. & Sober, S. J., 2015, I : Journal of Neuroscience. 35, 42, s. 14183-14194

**The singer and the song: The neuromechanics of avian sound production**

Elemans, C. P. H., 2014, I : Current Opinion in Neurobiology. 28, s. 172-178

**Vocal production complexity correlates with neural instructions in the oyster toadfish (*Opsanus tau*)**

Elemans, C. P. H., Mensinger, A. F. & Rome, L. C., 2014, I : Journal of Experimental Biology. 217, 11, s. 1887-1893

**How the bat got its buzz**

Ratcliffe, J. M., Elemans, C. P. H., Jakobsen, L. & Surlykke, A., 2013, I : Biology Letters. 9, 2, s. 20121031

**The songbird syrinx morphome: a three-dimensional, high-resolution, interactive morphological map of the zebra finch vocal organ**

During, D. N., Ziegler, A., Thompson, C. K., Faber, C., Muller, J., Scharff, C. & Elemans, C. P. H., 2013, I : B M C Biology. 11, s. 27

**Superfast muscles are devoid of glycogen particles in the intramyofibrillar space**

Nielsen, J., Ørtenblad, N., Frandsen, U., Schrøder, H. D. & Elemans, C., 2012.

**Superfast muscles are devoid of glycogen particles in the intramyofibrillar space**

Nielsen, J., Ørtenblad, N., Frandsen, U., Schrøder, H. D. & Elemans, C., 2012.

**Superfast muscles set maximum call rate in echolocating bats**

Elemans, C., Mead, A., Jakobsen, L. & Ratcliffe, J., 2011, I : Science. 333, s. 1885-1888 4 s.

**Walking the line: search behavior and foraging success in ant species**

Pearce-Duvet, J., Elemans, C. & Feener, D., 2011, I : Behavioral Ecology. 22, 3, s. 501-509 8 s.

**Smooth operator: Avoidance of subharmonic bifurcations through mechanical mechanisms simplifies song motor control in adult zebra finches**

Elemans, C., Laje, R., Mindlin, G. & Goller, F., 2010, I : Journal of Neuroscience. 30, s. 13246 –13253

**Amplitude and frequency modulation control of sound production in a mechanical model of the avian syrinx**

Elemans, C., Muller, M., Larsen, O. N. & van Leeuwen, J. L., 15. apr. 2009, I : Journal of Experimental Biology. 212, 8, s. 1212-1224 13 s.

**Lynhurtig vokal gymnastik: Den neuromuskulære kontrol af fuglenes sang**

Elemans, C. & Larsen, O. N., 2009, *Carlsbergfondet. Årsskrift 2009*. Kyhn, G. (red.). København, s. 14-21 8 s.

**Spectrogram analysis of mechanical events in sound production of animals**

Elemans, C., Muller, M. & Heeck, K., 2008, I : Bioacoustics - the International Journal of Animal Sound and its Recording. 18, s. 183-212 29 s.

### **Superfast muscles control sound production in songbirds**

Elemans, C., Mead, A., Rome, L. C. & Goller, F., 2008, I : P L o S One. 3, s. e2581

### **The biomechanics and neuromuscular control of vocalisation in a non-songbird**

Elemans, C., Zaccarelli, R. & Herzel, H., 2008, I : Journal of the Royal Society. Interface. 5, s. 691-703 12 s.

### **Parasitic inhibition of cell suicide facilitates symbiosis**

Pannebakker, B., Loppin, B., Elemans, C., Humblot, L. & Vavre, F., 2007, I : Proceedings of the National Academy of Sciences of the United States of America. 104, s. 213-215 3 s.

### **Modelling bird songs: Voice onset, overtones and registers**

Zaccarelli, R., Elemans, C., Fitch, T. & Herzel, H., 2006, I : Acustica United with Acta Acustica. 92, s. 741-749 8 s.

### **Syringeal muscles fit the trill in ring doves (*Streptopelia risoria* L.)**

Elemans, C., Spierts, I., Hendriks, M., Schipper, H., Müller, U. & van Leeuwen, J., 2006, I : Journal of Experimental Biology. 206, s. 965-977 12 s.

### **Superfast muscles control dove's trill**

Elemans, C., Spierts, I., Müller, U., van Leeuwen, J. & Goller, F., 2004, I : Nature. 341, s. 146 1 s.

## **Presseklip**

### **DR1 TV Avisen 18.30**

Coen Elemans  
09/10/2019  
1 Mediebidrag

### **Forvildet hval gav unikke forskningsmuligheder**

Coen Elemans  
21/12/2018  
1 Mediebidrag

### **Fugle og mennesker synger på samme måde**

Coen Elemans  
30/12/2015  
1 element af Mediedækning

### **Hvalens strubehoved til SDU**

Coen Elemans  
13/12/2018  
1 Mediebidrag

### **Kan man lave lyd med en død hval? Pukkelhvalen fra Skagen skæres op**

Coen Elemans  
09/10/2019  
1 Mediebidrag

### **mice sing**

Coen Elemans  
10/10/2016  
1 element af Mediedækning

### **Mus synger deres kærlighedssange i ultralyd**

Coen Elemans  
04/11/2016

1 element af Mediedækning

**Nu bliver sejhvalen skåret op - én ting springer i øjnene**

Coen Elemans

11/12/2018

1 Mediebidrag

**Ny opdagelse: Fugle og mennesker synger på samme måde**

Coen Elemans

29/11/2015

1 element af Mediedækning

**Pukkelhvalen fra Skagen skæres op**

Coen Elemans

10/10/2019

1 Mediebidrag

**Rivaler undlader at dræbe hinanden - de strækker bare hals**

Coen Elemans

21/06/2015

1 element af Mediedækning

**Sejhvalen skåret op - nu kender vi kønnet**

Coen Elemans

11/12/2018

1 Mediebidrag