

CURRICULUM VITÆ for NICOLAI KONOW, Ph.D.

Current appointment

NIH Investigator at Brown University, Roberts Lab
Department of Ecology and Evolutionary Biology
Box G-B204 Providence, RI 02912 USA
Office: +1 401 863 6477 • Lab: 3 6578 • Fax: 3 5744
Email: nkonow@brown.edu • URL: Brown.edu/Research/Functional_Biology/

Concurrent appointments

Research Fellow at Johns Hopkins University, German Lab
Department of Physical Medicine & Rehabilitation (S.O.M.)
98 N. Broadway, Suite 409, Baltimore MD, 21231 USA

Adjunct Assistant Professor in Biology, Department of Biology
Hofstra University, Gittelson Hall Hempstead NY, 11549 USA

Academic Preparation

- 10-11 Investigator. Brown University, USA. Roberts Lab. Elastic mechanisms in animal movement
09-10 Post-doc. Brown University, USA. Roberts Lab. Elastic mechanisms in deceleration movements
08-09 Post-doc. Johns Hopkins University, USA. German Lab. Motor control of mammal feeding
06-08 Post-doc. Hofstra University, USA. Sanford Lab. Evolutionary physiology of fish feeding
00-06 SNF Ph.D. candidate. James Cook University, Australia. Bellwood Lab. Thesis: Ecomorphology of feeding in Angelfishes, f. Pomacanthidae: functional Innovations in biting reef fishes [[pdf](#)]
97-99 MSc. (Cand. Scient. Biol.). U. Copenhagen, Denmark. Jespersen Lab.
Thesis: Structural and functional specialisations in deep-sea fish retinae.
92-97 BSc. Zoomorphology. U. Copenhagen, Denmark. Høeg Lab.
Thesis: Vertebrate evolution and the origin of tetrapods (in Danish).

Professional dissemination

Peer-reviewed publications, with names of students under my mentorship in italics

1. Bellwood DR, van Herwerden L, **Konow N** (2004). Evolution and biogeography of marine angelfishes (Pisces: Pomacanthidae) *Mol. Phylog. Evol.* 33: 140-155. [[pdf](#)]
2. **Konow N**, Bellwood DR (2005) Prey-capture in *Pomacanthus semicirculatus* (Teleostei, Pomacanthidae): functional implications of intramandibular joints in marine angelfishes. *J Exp. Biol* 208:1421-1433. [[pdf](#)]
3. **Konow N**, Fitzpatrick R, *Barnett A* (2006). Adult emperor angelfish (*Pomacanthus imperator*) clean giant sunfishes (*Mola mola*) at Nusa Lembongan, Indonesia. *Coral Reefs* 25: 208. [[pdf](#)]
4. **Konow N**, Gerry S (2008). Symposium introduction: Electromyography interpretation and limitations in functional analyses of musculoskeletal function. *Integr. Comp. Biol.* 48(2):241-245. [[pdf](#)]
5. **Konow N**, *Camp AL*, Sanford CPJ (2008). Congruent modulation-patterns in muscle activity and kinematics govern a convergently derived teleosts prey-processing behaviour. *Integr. Comp. Biol.* 48(2):246-260. [[pdf](#)]
6. **Konow N**, Wainwright PC, Bellwood DR, Kerr AM (2008). Evolution of novel jaw joints promote trophic diversity in coral reef fishes. *Biol. J. Linn. Soc.* 93: 545-555. [[pdf](#)]
7. **Konow N**, Sanford CPJ. (2008). Biomechanics of a convergently derived prey-processing mechanism in fishes: evidence from morphology and raking kinematics. *J. Exp. Biol.* 211, 3378-3391. [[pdf](#)]



"I am a functional biologist, aiming to link morphological innovations and functional disparity with the ecosystem roles of species and groups.

I am also interested in how innovations and disparity influence macroevolutionary mode and tempo"

8. **Konow N**, Sanford, CPJ (2008). Is a convergently derived muscle-activity pattern driving novel raking behaviours in teleost fishes? *J. Exp. Biol.* 211:989-999. [pdf]
9. *Camp AL*, **Konow N**, Sanford CPJ (2009). Functional morphospace of the tongue-bite apparatus in *Chitala ornata* (Notopteridae) and *Salvelinus fontinalis* (Salmonidae). *J. Anat.* 214, 717-728. [pdf]
10. Ferry-Graham LA, **Konow N**. (2010). Is an intramandibular joint in *Girella* a mechanism for increased force production? *J. Morph.* 271, 271-279. [pdf]
11. Bellwood DR, **Konow N**, Herwerden L, Klanten SO (2010) Evolutionary History of Butterflyfishes (f. Chaetodontidae): the Rise of Coral Feeding Fishes. *J. Evol. Biol.* 23, 237-446. [pdf]
12. **Konow N**, Ferry-Graham LA (2010). Ecomorphology of Butterflyfishes. Chapter 2 *In: Biology of Butterflyfishes* (Eds. MS Pratchett, M Berumen, BG Kapoor). Science Publishers Inc. [pdf]
13. *Gintof C*, **Konow N**, Ross CF, Sanford CPJ (2010). Rhythmicity in teleost chewing: a comparison with amniotes. *J. Exp. Biol.* 213, 1868-1875. [pdf]
14. **Konow N**, German RZ, Thexton A, Crompton A (2010) Regional differences in length-change and electromyographic heterogeneity in the sternohyoid muscle during infant mammalian swallowing *J. Appl. Physiol.* 109, 439-448. [pdf]
15. *Wentzel S*, **Konow N**, German RZ. (2011) Hyoid muscle activity during head movements in mammals. *J. Exp. Zool. A.* 315A, 111-174 [pdf]
16. German RZ, Campbell-Malone R, Crompton, AW, Ding P, *Holman S*, **Konow N**, Thexton AJ (2011). The concept of hyoid posture. *Dysphagia.* 26(2), 97-89 [pdf]
17. **Konow N**, Herrel A, Ross CF, Williams SH, German RZ, Sanford C, *Gintof C*. (2011). Jaw and hyoid muscle activity patterns driving chewing in jawed vertebrates. *Integr. Comp. Biol.* 51(2), 235-246 [pdf]
18. **Konow N** & Bellwood DR (2011). Functional Disparity and Ecological Diversification in Marine Angelfishes, f. Pomacanthidae. *PLoS One* 6, e24113 [pdf]
19. **Konow N**, Azizi E, Roberts TJ (2011). Rapid and high-powered energy absorption by skeletal muscle-tendon units during decelerating movement. *Proc. R. Soc. B.* [RSPB-2011-1435] [pdf]
20. Ferry LA, Gibb AC, **Konow N**, (accepted) Prey-capture kinematics of kissing gourami and other anabantid fishes: the consequence of the intramandibular joint. *J. Exp. Zool. A.* 2011-08-0110 [email]
21. *Matson A*, *Konow P*, **Konow N**, Roberts TJ. (Revised) Variations in tendon material properties with muscle function. *J. Exp. Biol.* [email]
22. **Konow N**, Herrel A, *Krijestorac B*, Sanford CPJ (Revised). A novel prey processing mechanism in the Siamese fighting fish, *Betta splendens*. *J. Comp. Physiol. A.* [email]

Manuscripts in review, with names of students under my mentorship in italics

23. *Wahl S*, **Konow N**, German RZ. (in review) Regional Specialization in the geniohyoid and sternohyoid during mammalian suckling. *J. Exp. Zool. A.* [email]

Manuscripts available for preview, with names of students under my mentorship in italics

24. **Konow N**, Roberts TJ (in prep). Burst energy absorption and dissipation by a muscle tendon unit. *J. Physiol.* [email]
25. **Konow N**, Price S, Wainwright PC, Bellwood D, *Åbom R* (in prep). Morphospace evolution in coral reef butterfly and bannerfishes *Proc. R. Soc. B.* [email]
26. **Konow N**, Wainwright PC (in prep). Coordination and integration in feeding kinematics: reversal from biting to suction feeding in *Genicanthus*, f. Pomacanthidae. *J. Exp. Biol.* [email]
27. **Konow N**, Roberts TJ (in prep). Prepare for impact: constant rate of preparatory force development in a leg extensor muscle matches leg stiffness to anticipated landing intensity. *Biology Letters* [email]
28. *Gidmark N*, *Tarrant J*, **Konow N**, Brainerd E (in prep). Bite force is limited by the length-tension relationship of skeletal muscle in three cyprinid fish species *J. Exp. Biol.* [email]
29. *Gidmark N*, **Konow N**, *LoPresti E*, Brainerd E (in prep). Ecomorphological diversification of jaw muscle mechanics and bite force production among cyprinid fishes *Biology Letters* [email]

Major funding (amount where awarded, resubmission date otherwise)

2000: Danish Research Agency (SNF) [642-00-0229] fellowship for <i>Ph.D.</i> abroad:	225.000\$
2004: ARC, PGS: <i>Evolution of molecular diversity in coral reef fishes</i> (junior investigator):	40.000\$
2006: Nat. Geo. [RP8153-06] <i>Goliath grouper feeding</i> Co-PIs, Husky (WKU) & Rhyne (RWU):	15.000\$
2009: NIH [RO1 DC009980-01] <i>Vagus lesions and muscle function</i> , investigator (PI R. German):	1,5M\$
2010: Nat. Geo. [EC0439-10] <i>Fish that feed at break-neck speed</i> , (Co-PI, S. Husky, WKU):	50.000\$
2011: NSF MRI [1126234]: Acquisition of 3D PIV system [Co-PI; PI. C. Sanford, Hofstra]:	360.809\$
2012: NSF [IOS1223916] Functional innovation in cyprinodontiform fishes (Co-PI; PI: L. Ferry, ASU).	
In prep: NSF <i>Nutritional physiology of reef fish feeding</i> , w. L. Ferry (ASU) & D Raubenheimer (Massey).	
In prep: VA CDA-II <i>Training effects on the mechanics of muscle tendon units</i> . Submission Mar 8, 2012.	

Scholarships, stipends, grants and sponsorships

2011: Apeks Marine Equipment, UK. Technical dive equipment:	3.000\$
2009-2011: Brown University, Bushnell Bursary:	6.000\$
2009: Johns Hopkins University, internal travel grant:	1.000\$
2008: Hofstra University, Deans travel grant:	1.500\$
2007: Journal of Experimental Biology, SICB symposium funding:	4.075\$
2007: AD instruments, SICB symposium funding:	1.000\$
2007: Grass Technologies, SICB symposium funding:	500\$
2007: SICB, Division of Comparative Biomechanics. symposium funding:	500\$
2006-2008: Hofstra University HCLAS faculty development grant:	2.300\$
2005: Graduate Research Scheme, JCU. Research grant:	1.000\$
2005: Graduate Research Scheme, JCU. PhD Completion Scholarship:	3.000\$
2004: Graduate Research Scheme, JCU. DRS International travel award:	1,500\$
2003: Pixoft – NAC, Movias high-speed motion analysis software:	7,000\$
2001: Sea Pro UK. UW housing for DV video:	1,500\$
2001: Australian Coral Reef Society. Research fellowship:	2,500\$
2000-2005: James Cook University. Internal Research Allowances:	9,000\$
1997: Director Einar Hansen and Wife's Scholarship:	3,750\$
1997: Clemént's Scholarship, Zoological Institute, University of Copenhagen:	1,000\$
1997: Prof. Johannes Schmidt's Oceanic Science Scholarship, ZMUC:	2,750\$

Invited seminars

2010 Brown University, Dept. Ecology & Evolutionary Biology. <i>Muscular control of animal movement</i> . University of Queensland, SBMS. <i>Innovation and Disparity in Comparative Anatomy</i> University of Chicago Illinois, OBA. <i>Innovation and disparity principles in functional biology</i>
2009 University of Western Kentucky. Research seminar: <i>Structural innovations and functional disparity</i> Ohio University, Biological/Biomedical Sciences: <i>Innovation and disparity concepts in functional biology</i> Brown University, Ecology and Evolutionary Biology: <i>Innovations and disparity in comparative biology</i> Roger Williams University, Biology and Aquaculture: <i>Innovations and disparity concepts in biology</i>
2008 University of Puerto Rico, Mayaguez. <i>Functional innovations in fish feeding</i> Brown university, RI. <i>Biomechanical linkages and complex feeding kinematics</i>

Invited symposium presentations

- 2010 **Konow N** *et al.* *Shifts in muscle activity patterns during evolution of gnathostome feeding* SICB, Jan 4th.
- 2008 **Konow N** & Sanford CPJ. *Pros and cons of electromyography in an integrative experimental context.* Late Breaking symposium: EMG interpretation and limitations in functional analyses of musculoskeletal function. SICB, 2008 San Antonio TX.
- Konow N** & Gerry S. *Symposium Introduction; interpretation and limitations of EMG in functional analyses of musculoskeletal function.* Late Breaking symposium: SICB, 2008 San Antonio TX.

Conference presentation, last five years

- 2012 **Konow N**, Roberts TJ. *Does extended training alter extensor muscle operating length?* SICB, Jan 5th.
Gidmark NJ *et al.* *Bite force limitation by the length-tension relationship of skeletal muscle in three cyprinid fish species.* SICB, Salt Lake City, Jan 6rd.
- 2011 **Konow N**, Roberts TJ. *Prepare for landing: leg extensor muscle force ramp-up prior to ground impact,* SICB/ DVM. Nov 5th.
Konow N, Roberts TJ. *Energy absorption by muscle in steady and unsteady movement* SICB, Jan 6th.
Gidmark NJ *et al.* *Bite force varies with pharyngeal jaw orientation and adductor muscle length in common carp: XROMM and 3D modeling approaches* SICB, Salt Lake City, Jan 6rd.
Matson A *et al.* *Variations in tendon material properties among muscles* SICB, Salt Lake City, Jan 6th.
Ferry LA *et al.* *Kissing and scraping: the intramandibular joint in Helostoma temmincki* SICB, Jan 7rd.
- 2010 **Konow N**, Azizi E, Roberts TJ. *Limb muscle function during high-powered energy absorption.* American Society of Biomechanics, Providence, Aug. 18-21st.
Konow N, Azizi E, Roberts TJ. *Limb muscle-tendon unit function in power-attenuation during rapid energy absorption.* Society of Experimental Biology, Prague, Jul. 3rd.
German RZ, Crompton A, **Konow N**, Thexton A. *Sensory stimulus and reflex response in mammalian swallowing.* SICB, Seattle. Jan 7th
Konow N, Azizi E, Roberts TJ. *Avian all-terrain: Tendons as power attenuators during rapid energy absorption .* SICB, Seattle. Jan 4th
- 2009 Wahl S. **Konow N**, German RZ. *Regional Specialization in the geniohyoid during mammalian suckling.* University of Maryland, Baltimore MD. Aug. 10.
German RZ, Crompton A, **Konow N**, Thexton A. *Rhythmic tongue movement motor pattern during swallowing.* DRS, New Orleans.
Humbert I, Celnik P, **Konow N**. *Cortical swallowing delay measured using rTMS.* DRS, New Orleans.
Gilson E, Hougland M, Huskey S, **Konow N**, Rhyne A. *Modulation of prey-capture behavior in goliath grouper Epinephelus itajara.* University of Western Kentucky, research day Feb. 21
Riggs M, Huskey S, Rhyne A, **Konow N**. *Scaling of feeding performance in goliath grouper Epinephelus itajara.* University of Western Kentucky, research day Feb. 21
Konow N, Thexton A, Crompton A, German RZ. *Muscle function in mammal swallows.* SICB, Boston.
Camp AL, **Konow N**, Sanford CPJ. *Trapezoids and tongues.* SICB, Boston, Jan 3-7.
Sanford CPJ, **Konow N**, Day S. *The role of maxillary swing in suction feeding.* SICB, Boston, Jan 3-7.
Gintof C, **Konow N**, Sanford CPJ. *Stereotypy in teleost prey-processing.* SICB, Boston, Jan 3-7.
- 2008 **Camp AL**, **Konow N**, Sanford CPJ. *Biomechanics of fish prey-processing.* DVM, Uconn. Oct. 25.
Sanford CPJ, **Konow N**, Day S. *Maxillary swing in suction feeding: a DPIV test.* DVM, Oct. 25
Gintof C, **Konow N**, Sanford CPJ. *Stereotypy in teleost prey-processing.* DVM, Uconn. Oct. 25
Konow N, **Camp AL** & Sanford CPJ. *Evolution of raking in teleosts.* ASIH, Montreal, July 24-28.
Gintof C, **Konow N**, Ross CF, Sanford CPJ. *Cyclicality and Stereotypy in Teleost Chewing Compared with Tetrapods.* ASIH, Montreal, July 24-28.
Konow N & Wainwright PC. *Planktivory in Genicanthus angelfishes (f. Pomacanthidae): Reversal of a functional innovation during transitions between feeding strategies?* ICRS 11, Florida, Jul 7-11.
- 2007 Huskey S, **Konow N** & Rhyne A. *Scaling of suction-performance in Epinephelus itajara: are Goliath groupers emptying caribbean reefs?* 60th Gulf & Caribbean Fisheries Institute meeting, Punta Cana DR.

Conference presentation, last five years (cont'd)

Gurevich A, **Konow N**, Sanford CPJ. *Evolution of a Modulated Raking Behavior in Bony-Tongued Fishes (Osteoglossomorpha; Teleostei)*. DVM, RI, Oct. 13.

Krijestorac B, **Konow N**, Sanford CPJ. *Prey-processing in Siamese Fighting fish, Betta splendens: evidence of a convergently derived raking behaviour among derived percomorphs?* DVM, RI, Oct. 13.

Camp AL, **Konow N**, Sanford CPJ. *Functional morphospace of the tongue-bite apparatus in Chitala ornata (Notopteridae) and Salvelinus fontinalis (Salmonidae)*. DVM, RI, Oct. 13.

Gintof C, **Konow N**, Ross CF, Sanford CPJ. *Chewing in Teleost Fishes: Patterns of Stereotypy and Cyclicity Relative to Tetrapod Vertebrates*. DVM, RI, Oct. 13.

Konow N & Sanford CPJ. *Convergent and divergent evolutionary patterns in raking, a novel salmonid and osteoglossomorph feeding behaviour* ICVM8, Paris Fr.

Konow N, Wainwright PC, Bellwood DR, Kerr, AM. *Intramandibular joints help coral reef fishes have a bite*. ICVM8, Paris Fr.

Konow N & Sanford CPJ. *Congruent patterns of muscle activity and kinematics in modulation of a novel feeding mechanism in fishes*. SICB, Phoenix, AZ.

Konow N, Wainwright PC, Bellwood DR & Kerr AM. *Intramandibular joints help coral reef fishes have a bite*. SICB, Phoenix, AZ.

Teaching appointments

06-09: Adjunct assistant professor, Hofstra University: Behavior, Ecology and Evolution (Bio 14, enrolled: 40 pr. semester); Human Anatomy and Physiology (Bio103/105, 120 students pr. semester); student research-training (Bio 90, 91, 190: 12 undergraduate and 4 MSc students).

00-05: Adjunct Lecturer on 3rd year course MB3160 (Biology of reef fishes); covering ecomorphology of feeding in Teleost fishes. James Cook University, Australia.

00-05: Adjunct laboratory teaching assistant; MB3160 (Biology of reef fishes); MB 2050 (Functional marine zoology). James Cook University, Australia

99-00: Adjunct Assistant Lecturer and laboratory coordinator on BSc. qualifying course in *Zoological Physiology and Morphology*, Dept. of Zoomorphology – U. Copenhagen.

98-99: Adjunct Assistant Lecturer and laboratory coordinator on the 3rd year graduate course in *Practical Zoological Morphology*, Dept. of Zoomorphology – U. Copenhagen.

97-98: Adjunct Teaching assistant, Dept. of Zoomorphology, University of Copenhagen DK. course in *Zoological Physiology and Morphology* (BSc. qualifying course), lecturing on vertebrate eye morphology; emphasis on ocular and retinal specializations in bird, snake and fish eyes.

Popular media coverage

2011. Publication #19: [Scientific American](#), [Medill](#), [Physorg](#), [Science ORF](#), [R&Dmag](#), [ABC](#), [ABC42](#)

2011. Publication #18: [Discovery News](#)

2011. Publication #17: [NSF news](#), [Discovery News](#), [PBS News-hour](#), [The Hindu](#), [TruthDive](#), [OCC Biology News](#), and interestingly [Creation Evo Headlines](#)

2011. Coverage in [Naked Science](#), of my National Geographic sponsored fieldwork on pelagic top predatory fishes. European show title: [Hunters of the Deep](#). If you missed it on Nat Geo, then watch it [here](#).

2010. National Geographic television segment on Goliath grouper research in the program [Amazing](#).

2008. Research featured by [AD-instruments](#), in conjunction with my SICB symposium.

2008. Commentary in [Newsday](#), NY: Long Island sound invaded by thresher shark and lions mane jellyfish.

2005. Doctoral research featured in the [BBC Wildlife Magazine](#) [[jpg](#)]

2005. Doctoral research featured on Australian Channel Ten's 'Totally Wild' show [[avi](#)].

2005. Doctoral research 'Inside JEB': Angelfishes take sponge reefs by storm: [J Exp Biol 2005 208: \[pdf\]](#).

Field expeditions and laboratory visits

- Jun.-Jul. 10: National Geographic sponsored expedition with S. Huskey. *Fish that feed at break-neck speed*
- Jun. 07-Jul. 08: National Geographic-sponsored work, with Dr. S. Huskey & Dr. A. Rhyne. *Measuring scaling of suction feeding capability in Goliath Grouper (E. iticara) using underwater high-speed video.*
- Aug. 2007: University of Antwerpen, Department of Biology, Belgium. Hosts: Dr. A. Herrel & Prof. P. Aerts: *Radiociné of hyoid motion in rainbow Oncorhynchus, Betta and small animal EMG techniques.*
- Aug. 2005: University of Hawaii - Meno, Hawaii Institute of Marine Biology, Oahu – Hawaii. Host: Dr. B. Bowen, Dr. R. Pyle & Prof. T. Tricas: *Feeding kinematics in Hawaiian butterfly and angelfishes.*
- July 2004: University of California Davis, USA. Host: Prof. P. Wainwright.: *Feeding behavioural modulation*
- Jun. 2004: Aliwal shoal, Durban - S. Africa, Host: Mr. R. Jackson, ESKOM: *Modulation of prey-capture kinematics in Pomacanthus rhomboides and other chaetodontoids of the West Indian Ocean.*
- May 2004: University of the Ryukyus, Sesoko Marine Laboratory, Akajima Field Laboratory. Host: Dr. M. Arvedlund: *Olfactory physiology in chaetodontoid fishes.*
- Dec. 2003: R/V Undersea Explorer: Cod Hole GBR, Osprey Reef, Coral Sea: *Grouper suction-feeding*
- 2001-2003: Lizard Island and Orpheus Island Research Stations, GBR, Australia: *Microhabitat utilisation and prey-capture kinematics of chaetodontoid fishes on the GBR.* 200+ field-days.
- Sept. 2000: One Tree Island Research Station, with M. J. Marnane, Collecting chaetodontoid fishes for morphology and kinematics analysis; collecting apogonid fishes to quantify defecation rates.
- July 2000: Expeditions with R/V Harry Messel and R/V Lady Basten (A.I.M.S.), Outer Great Barrier Reef, collecting chaetodontoid fishes for morphospace analyses using barrier nets and spear guns.
- Jan.-May 97: Visiting Researcher, Dept. Anatomical Sciences, Adelaide University, Australia. Host: Dr. N. A. Locket. MSc. pilot study: *“Light and Electron microscopy of retinal morphology”.*

Academic service

Committee memberships

2009. Steering committee: *XMA Research Coordination Network.* Brown University, Aug. 8th to 10th
2009. Working-Group: *FEED - The Feeding Experiments End-user Database.* NESCent, Feb 25th–28th

Session chairing and symposium organization

2011. Society for Integrative and Comparative Biology, Division of Vertebrate Morphology
2010. Society for Integrative and Comparative Biology, Division of Comparative Physiology
2009. Society for Integrative and Comparative Biology, Division of Vertebrate Morphology
2009. Convener of Morph-group, Dept. Ecology and Evolutionary Biology, Brown University.
2008. American Society for Ichthyology and Herpetology.
2008. Organizer: *Late-breaking symposium* at SICB 2008, San Antonio TX. Symposium title:
Electromyography interpretation and limitations in functional analyses of musculoskeletal function.

Referee service

- Proposal referee:* United States NSF, 2009 (1), Romanian National Science Council (2).
- Guest Editor:* J. Exp. Zool. A. Special issue, Feeding Experiments End-user Database.
- Biological editorial member:* The Danish National Encyclopaedia, Gyldendal Publishing, DK (1997-99)
Zoological Encyclopaedia, Erlandsen Media Publishing, DK (1997-98).
- Ad hoc referee for:* Proceedings B. (1), Biological Journal of the Linnaean Society (4), Evolution (1), Zoology (3), Belgian Journal of Zoology (2), Journal of Experimental Marine Biology and Ecology (2), Journal of Fish Biology (3), Aquatic Living Resources (1), Acta Zoologica (1), Journal of Experimental Zoology, A. (1), Frontiers in Zoology (1), Physiological and Biochemical Zoology (2).

Professional affiliations

Society for Integrative and Comparative Biology
International Society of Vertebrate Morphologists
American Society for Biomechanics
American Society of Ichthyologists and Herpetologists
American Academy of Underwater Science

Society for Experimental Biology
American Association of Anatomists
Society for Study of Evolution
International Society for Reef Studies
Danish Natural History Society (inactive)

Ongoing collaborations

R. German (JHMI), A. Thexton (Kings College) & A. Crompton (Harvard): *Mammal feeding muscle mechanics*
A. Herrel (MNHN, Harvard, U. Antwerp): *Vertebrate motor control evolution, archerfish spitting*
C. Ross (U. Chicago OEB): *Stereotypic, cyclic and rhythmic food-processing activity*
N. Gidmark, B. Brainerd (Brown), M. Westneat (UCI): *XROMM analyses of 4-bar linkages in fish feeding*
C. Sanford (Hofstra), S. Day (RIT): *Computational fluid dynamics, feeding and locomotion*
P. Wainwright (UC Davis), C. D. Hulsey (U. Tenn): *Functional innovations in reef fish trophic evolution*
D. Bellwood, L. v. Herwerden (JCU): *Coral reef fish ecology, biogeography and phylogenetics*
L. Ferry (MLML, ASU): *Ecomechanics and modelling of intramandibular joints*
S. Huskey (WKU), & A. Rhyne (RWU): *Groupers suction feeding, scaling of ram-suction index*
D. Raubenheimer (U. Massey), J. Choat (JCU) & L. Ferry (ASU): *Nutritional physiology and ecology of reef fishes*
S. Thorrold, M. Berumen (WHOI): *Functional ecology and physiology of butterflyfishes*

Professional referees

1) Prof. Thomas Roberts (R)
Current postdoctoral monitor
Ecology and Evolutionary Biology
Brown University Box G-B205
thomas_roberts@brown.edu
Tel: +1 (401) 863 3608

2) Prof. Rebecca German (R)
Former postdoctoral monitor
Dept. Phys. Med. & Rehabilitation
Johns Hopkins Medical University
rgerman2@jhmi.edu
Tel: +1 (410) 502 4461

3) Prof. Christopher Sanford (B)
Former postdoctoral monitor
Department of Biology
Hofstra University
biocpj@hofstra.edu
Tel: +1 (516) 463 5526

4) Prof. Ronald Sarno (T)
Teaching faculty colleague
Department of Biology
Hofstra University
ronald.sarno@hofstra.edu
Tel: +1 (516) 463 4266

5) Prof. Peter C. Wainwright (R)
Scientific mentor and collaborator
Section of Evolution and Ecology
University of California Davis
pcwainwright@ucdavis.edu
Tel: +1 (530) 752 6782

6) Prof. Elizabeth Brainerd (R)
Scientific mentor and collaborator
Ecology and Evolutionary Biology
Brown University Box G-B205
brainerd@brown.edu
Tel: +1 (410) 863 9261

7) Assoc. Prof. Lara Ferry (R)
Scientific collaborator
Div. of Math. and Natural Sciences
Arizona State University
lara.ferry@asu.edu
Tel: +1 (623) 810 4013.

8) Prof. J. Howard Choat (R)
Scientific mentor and collaborator
Dept. Marine Biology & Aquaculture
James Cook University, Townsville
john.choat@jcu.edu.au
Tel: +61 7 4781 6383

9) Prof. David R. Bellwood (B)
Ph. D. advisor
ARC centre of excellence
James Cook University
david.bellwood@jcu.edu.au
Tel: +61 7 4781 4447

(R, research; T, teaching; B, both; click name for website)