

AURELIE GOUTTE

RESEARCH INTERESTS: Wildlife ecotoxicology, eco-physiology, behavioural endocrinology, life-history traits, demography, population dynamics, trophic ecology

EDUCATION

- 2007-2010: **Ph.D studies in Avian Eco-physiology, Centre d'Etudes Biologiques de Chizé (CEBC)**
2006-2007: Graduate studies in **Ecology and Evolutionary Biology, University of Montpellier II**
2006: Erasmus mobility, the University Centre in Svalbard, Norway, 8 months
2004-2007: Engineering studies in **Environmental and agronomical sciences, SupAgro Montpellier**

PROFESSIONAL EXPERIENCE

- Oct. 2014: Associate professor, EPHE, Laboratoire Hydrologie et environnement, UMR 7619 METIS
2012-2014: Postdoctoral research associate, CEBC-CNRS (Centre d'Etudes Biologiques de Chizé, Dr. O. Chastel and Dr C. Barbraud): **Demographic responses to heavy metals and persistent organic pollutants in seabirds**
2010-2012: Postdoctoral research associate, LOCEAN-CNRS (Research Centre in Oceanography and Climat, Dr. G. Massé): **Development of new sea ice biomarkers within Antarctic marine ecosystems**
2007-2010: PhD student, CEBC-CNRS (advisors: Dr. O. Chastel and Dr. H. Weimerskirch): **Hormonal mechanisms underlying the timing of breeding of polar seabirds**
2007 Masters student, CEBC-CNRS (supervisor: Dr. O. Chastel): Stress and survival in a long-lived bird: an ecophysiological approach
2006 Masters student, The University Centre in Svalbard, Longyearbyen, Norway (Pr. J. Berge): Feeding ecology of seabirds in response to prey availability

SCIENTIFIC PUBLICATIONS

- Goutte, A., Barbraud, C., Herzke, D., Bustamante, P., Angelier, F., Tartu, S., Clément-Chastel, C., Moe, B., Bech, C., Gabrielsen, G.W., Bustnes, J.O., Chastel, O. (2015) Survival rate and breeding outputs in a high Arctic seabird exposed to legacy persistent organic pollutants and mercury. *Environmental Pollution* 200, 1-9.
- Goutte, A., Charrassin, J-B., Cherel, Y., Carravieri, A., De Grissac, S., Massé, G. (2014) Importance of ice algal production for top predators: new insights using sea ice biomarkers. *Marine Ecology Progress Series* 513, 269-275

EPHE, UMR 7619, UPMC/CNRS
Case courrier 105, Tour 46/56
4 place Jussieu, 75252 Paris Cedex 05

Tel: +33 (0)1 44 27 63 20
Mail: aurelie.goutte@ephe.sorbonne.fr
aurelie.goutte@upmc.fr
Web: <http://aureliegoutte.webs.com/>

- Tartu, S., Bustamante, P., Goutte, A., Bustnes, J.O., Cherel Y., Weimerskirch, H., Chastel, O. (2014) Age related mercury contamination and endocrine disruption in a long-lived Antarctic bird, the snow petrel. *PLoS ONE* 9(7): e103642.
- Goutte, A., Barbraud, C., Meillère, A., Carravieri, A., Bustamante, P., Labadie, P., Budzinski, H., Delord, K., Cherel, Y., Weimerskirch, H., Chastel, O. (2014) Demographic consequences of heavy metals and persistent organic pollutants in a vulnerable long-lived bird, the wandering albatross. *Proceedings of the Royal Society B* 281, 20133313
- Goutte, A., Cherel Y., Ozouf-Crosta C., Robineau C., Lanshere J., Massé G. (2014) Seasonal contribution of sea ice organic matter in the diet of Antarctic fishes: a diatom-specific Highly Branched Isoprenoid approach. *Polar Biology* 37, 903-910
- Jaeger, A., Goutte, A., Lecomte, V.J., Richard, P., Chastel, O., Barbraud, C., Weimerskirch, H., Cherel, Y. (2014) Age, sex and breeding status shape a complex foraging pattern in an extremely long-lived seabird. *Ecology* 95, 2324-2333
- Goutte, A., Bustamante, P., Barbraud, C., Delord, K., Weimerskirch, H. Chastel, O. (2014) Demographic responses to mercury exposure in two closely-related Antarctic top predators. *Ecology* 95, 1075–1086
- Goutte, A., Angelier, F., Bech, C., Clément-Chastel, C., Dell'Omo, G., Gabrielsen, G.W., Lendvai, Á.Z., Moe, B., Noreen, E., Pinaud, D., Tartu, S., Chastel O. (2014) Annual variation in the timing of breeding, pre-breeding foraging areas and corticosterone levels in an Arctic population of black-legged kittiwakes. *Marine Ecology Progress Series* 496, 233-247
- Goutte, A., Chevreuil, M., Alliot, F., Eléaume, M., Chastel, O., Cherel, Y., Massé, G. (2013) Persistent organic pollutants in benthic and pelagic organisms off Adélie Land, Antarctica. *Marine Pollution Bulletin* 77, 82-89
- Tartu, S., Goutte, A., Angelier, F., Clément-Chastel C, Moe, B., Bech, C., Gabrielsen, G.W., Bustnes, J.O., Bustamante, P., Chastel, O. 2013. Mercury disrupts luteinizing hormone release and underlies skipped reproduction in an Arctic seabird. *Biology Letters* 9(4):20130317
- Goutte, A., Cherel, Y., Houssais M.N., Klein, V., Ozouf-Costaz, C., Raccurt, M., Robineau, C., Massé, G. (2013). Diatom specific highly branched isoprenoids as biomarkers in Antarctic consumers. *PLOS ONE* e56504
- Nordstad, T., Moe, B., Bustnes, J.O., Bech, C., Chastel, O., Goutte, A., Trouvé, C., Herzke, D., Gabrielsen, G.W. (2012) POPs and baseline corticosterone levels in kittiwakes during three periods of the breeding season. *Environmental Pollution* 164, 219-226
- Frederiksen, M., et al. (2012) Multi-colony tracking reveals the non-breeding distribution of a pelagic seabird on an ocean basin scale. *Diversity and Distributions* 18, 530-542
- Goutte, A., Kriloff, M., Weimerskirch, H., Chastel, O. (2011) Why do some adult birds skip breeding? A hormonal investigation in a long-lived bird. *Biology Letters* 7, 790-792
- Goutte, A., Antoine, E., Chastel, O. (2011) Experimentally delayed hatching triggers a magnified stress response in a long-lived bird. *Hormones and Behavior* 59, 167-173

- Goutte, A., Clément-Chastel C, Bech, C., Gabrielsen, G.W., Chastel, O. (2011) Experimentally reduced corticosterone release promotes early breeding in Black-legged kittiwakes. *Journal of Experimental Biology* 214, 2005-2013
- Goutte, A., Antoine, E., Weimerskirch, H., Chastel, O. (2010) Age and the timing of breeding in a long-lived bird: a role for stress hormones? *Functional Ecology* 24, 1007-1016
- Goutte, A., Angelier, F., Welcker, J., Moe, B., Clément-Chastel, C., Gabrielsen, G.W., Bech, C., Chastel, (2010) Long-term survival effect of corticosterone manipulation in Black-legged kittiwakes. *General and Comparative Endocrinology* 167, 246-251
- Goutte, A., Angelier, F., Clément-Chastel C, Trouvé, C., Moe, B., Bech, C., Gabrielsen, G.W., Chastel, O. (2010) Stress and the timing of breeding: glucocorticoids- luteinizing hormone relationships in an arctic seabird. *General and Comparative Endocrinology* 169, 108-116

REVIEWING FOR INTERNATIONAL JOURNALS

Journal of Avian Biology, Science of the Total Environment, PLOS ONE, Ecological application, Hormones and Behaviour, Nature Scientific Report, Marine Ecology Progress Series, Environmental Sciences Group, General and Comparative Endocrinology, Journal of Experimental Marine Biology and Ecology, Comparative Biochemistry and Physiology, Ardeola, etc.

TEACHING ACTIVITIES

Lectures and practical work

- Statistics
- Wildlife ecotoxicology
- Biogeochemistry in aquatic environments
- Ecophysiological responses to climate change

Supervision of students (ENS in 2009, Master 1 in 2011, DUT in 2011, Master 2 in 2015)

OUTREACH ACTIVITIES

- Co-author of the **book** "Antarctique: une explosion de vie" for the Museum of Natural History, Le Havre. Scientific presentation at the exhibition.
- Co-author of the **book** « Monde polaires : Hommes et biodiversités des défis pour la science », 2012, ed Le Cherche Midi, ISBN-10: 2749123666
- Stand animator at various scientific dissemination events for children or general public