

Personal information

Name: Bert Foquet

Date of birth: 24/09/1992

Nationality: Belgian

Place of Birth: Cartagena, Colombia

Education

Year	Degree	Institution
2016-present	PhD Entomology	Texas A&M University, USA
Jun-Aug 2017	Internship	KULeuven, Belgium
2013-2015	Master of science Biochemistry and biotechnology Graduated with Great Distinction	University of Antwerp, Belgium
2010-2013	Bachelor of science Biochemistry and biotechnology Graduated with Great Distinction	University of Antwerp, Belgium
2004-2010	Secondary school Latin-Science	College van het Eucharistisch Hart, Essen, Belgium

Scientific experience

- PhD internship** (Jun-Aug 2017): *Getting acquainted with RNAi-technology in locusts*
Animal Physiology and Neurobiology, KULeuven, Belgium
Prof. Dr. J. Vanden Broeck, Dr. H. Verlinden
- Master thesis** (Spring 2015): *Investigating the Role of E2F1 in Dominant Intermediate Charcot-Marie-Tooth disease type C*
VIB department of molecular genetics, Antwerp, Belgium
Promotor: Prof. Dr. A. Jordanova
- Master internship** (Fall 2015): *An enhanced IGF-signaling in a mouse model with a conditional knock-out of progranulin*
Department of cytology and histology, University of Antwerp, Belgium
Promotor: Prof. Dr. S. Kumar-Singh
- Master group task** (Fall 2015): *Virtual company start-up: ABCeq (Animal Breeding & Conservation sequencing)*
Course Industrial microbiology and biotechnology, University of Antwerp, Belgium
- Certificate** (Fall 2015): *FELASA certificate type C (Focus on how to design, plan and carry out animal experiments)*
- Bachelor thesis** (Spring 2013): *Detection of the interaction between aminoacyl-tRNA-synthetases and druggable genes in two fruit fly models of CMT-neuropathy*
VIB department of molecular genetics, Antwerp, Belgium
Promotor: Prof. Dr. A. Jordanova
- Inventory project** (2009-2015): *Inventorying and monitoring project: grasshoppers in the cross-border nature reserve 'De Zoom-Kalmthoutse Heide' (Belgium - the Netherlands)*
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Acquired competences:

Fruit fly/mouse/grasshopper husbandry	SDS-PAGE
Genetic screens using fruit flies	Western Blot
Various Fly/Grasshopper behavioral assays	RNA extraction
Fly/grasshopper dissections	Real-Time quantitative PCR
Immunohistochemistry	Acquainted with Luminex xMAP-Technology
Bio-informatics analysis of RNA sequencing data	RNAi in locusts
Collecting and Identifying Orthoptera	

Languages

Dutch: mother tongue

Other languages:

	Understanding	Speaking	Writing
English	C2	C2	C2
French	B2	B1	B1
Spanish	B2	B1	B1
German	A2	A1	A1

Based on CEF self-assessment grid (<https://europass.cedefop.europa.eu/en/resources/european-language-levels-cefr/cef-ell-document.pdf>)**Refereed publications**

- (6) Wang, H.*, **Foquet, B.***, Song, H., Dierick, H., Gabbiani, F. (submitted) Molecular characterization and distribution of the main sodium channel, Para, in the optic lobe and central brain of the developing grasshopper. *Journal of Comparative Physiology*. *equally contributed.
- (5) Woller, D.A., **Foquet, B.**, Kilpatrick, S.K., Selking, R., Mazel, C., and Song, H. (submitted) Unlocking the dark: harnessing blue light fluorescence to illuminate hidden hexapods. *American entomologist*
- (4) Kilpatrick, S.K.*, **Foquet, B.***, Castellanos, A.A., Gotham, S., Little, D.W., Song, H., (2019) Revealing hidden density-dependent phenotypic plasticity in sedentary grasshoppers in the genus *Schistocerca*, 118, 103937 Stål (Orthoptera: Acrididae: Cyrtacanthacridinae). *Journal of Insect Physiology*. * equally contributed.
- (3) Pocco, M.E., Cigliano, M.M., **Foquet, B.**, Lange, C.E., Nieves, E.L. and Song, H. (2019) Density-dependent phenotypic plasticity in the South American locust, *Schistocerca cancellata* (Orthoptera: Acrididae: Cyrtacanthacridinae). *Annals of the Entomological Society of America*, 112(5), 458-472.
- (2) Cullen, D.A., Cease, A., Latchininsky, A.V., Ayali, A., Berry, K., Buhl, J., De Keyser, R., Foquet, B., Hadrich, J.C., Matheson, T., Ott, S.R., Poot-Pech, M.A., Robinson, B.E., Smith, J., Song, H., Sword, G.A., Vanden Broeck, J., Verdonck, R., Verlinden, H. and Rogers, S.M. (2017) From molecules to management: Mechanisms and consequences of locust phase polyphenism. *Advances in Insect Physiology* 53: 167-285.
- (1) Song, H., **Foquet, B.**, Mariño-Pérez, R. and Woller, D.A. (2017) Phylogeny of locusts and grasshoppers reveals complex evolution of density-dependent phenotypic plasticity. *Scientific Reports* 7: 6606.

Non-refereed publications

- 2019 Woller, D., **Foquet, B.** and Song, H. Polyneoptera Organized Meeting at 2019 Entomological Society of America Meeting: "Small Orders, Big Ideas". *Metaleptea*. 39(3): 6.
- 2019 Woller, D., **Foquet, B.** and Song, H. Reminder: Seeking Speakers for the 2020 ICE Symposium: "Polyneoptera for our Planet". *Metaleptea*. 39(3): 6.
- 2019 **Foquet, B.** Studying locust phase polyphenism of the Central American locust: tales from the field. *Metaleptea*. 39(3): 21-25.
- 2019 Woller, D., **Foquet, B.** and Song, H. Seeking Speakers for the 2020 International Congress of Entomology Symposium: "Polyneoptera for our Planet". *Metaleptea*. 39(2): 13.
- 2018 **Foquet, B.** The 2018 ESA Organized Meeting on orthopteroids draws near! *Metaleptea*. 38(3): 2-3.
- 2018 Mariño-Pérez, R., Sanabria-Urbán, S., **Foquet, B.** and Pocco, M. E. Collecting in Southern Mexico: Oaxaca and Guerrero states. *Metaleptea*. 38(1): 28-31.
- 2017 Maes, D., Adriaens, T., Decler, K., **Foquet, B.**, Foquet, R., Lambrechts, J., Lock, K. and Piesschaert, F. IUCN Rode Lijst van de sprinkhanen en krekels in Vlaanderen. Rapporten van het Instituut voor Natuur- en Bosonderzoek 2017 (29). Instituut voor Natuur- en Bosonderzoek, Brussel.
- 2017 Jacobs, A., Swinnen, K. and **Foquet, B.** Vind een Veenmol: resultaten publieksactie 2016. *Natuur.focus*. 16. 91-92.
- 2016 Mariño-Pérez, R. and **Foquet, B.** Collecting in Gorongosa National Park, Mozambique. *Metaleptea*. 36(3): 22-25.
- 2016 Mariño-Pérez, R., Woller, D., **Foquet, B.** and Selking, R. Collecting in Costa Rica: in search of Orthoptera. *Metaleptea*. 36(3): 25-29.

Presentations and posters contributed as primary author

- 2020 (anticipated): **Foquet, B.** and Song, H. Behavioral and molecular reaction norms of locust phase polyphenism in a phylogenetic frame work. Society of Integrative and Comparative Biology annual meeting, Austin, TX, USA
- 2019 (anticipated): **Foquet, B.**, Little, D., Poot-Pech, M. and Song, H. Process of gregarization and solitarization of the Central American locust (*Schistocerca piceifrons*) in the lab and in the field. Entomological society of America annual meeting, St Louis, MO, USA
- 2019: **Foquet, B.** and Song, H. Locust phase polyphenism in a phylogenetic framework: from behavior to molecular changes. Graduate student forum, Department of Entomology, Texas A&M University, TX, USA

- 2019: **Foquet, B.** and Song, H. Comparing behavioral, morphological, and molecular reaction norms of locust phase polyphenism. Ecological integration Symposium, Texas A&M University, TX, USA
- 2019: **Foquet, B.** and Song, H. A comparative study of behavioral, morphological, and molecular reaction norms of locust phase polyphenism. XIII International Congress of Orthopterology, Agadir, Morocco
- 2019: POSTER: **Foquet, B.**, Little, D., Poot-Pech, M.A., Song, H. Process of gregarization and solitarization of the Central American locust (*Schistocerca piceifrons*) in the lab and in the field. XIII International Congress of Orthopterology, Agadir, Morocco
- 2019: **Foquet, B.** and Song, H. A comparative study of behavioral, morphological, and molecular reaction norms of locust phase polyphenism. Student research week, Texas A&M University, TX, USA
- 2019: **Foquet, B.** and Song, H. A comparative study of behavioral, morphological, and molecular reaction norms of locust phase polyphenism. Society of Integrative and Comparative Biology annual meeting, Tampa, FL, USA
- 2018: **Foquet, B.** and Song, H. Density-dependent phase polyphenism in a phylogenetic framework: Insights from behavioral, morphological, and molecular data in a locust and related non-swarmling grasshoppers (Orthoptera: Acrididae: Cyrtacanthacridinae) ESA, ESC, and ESBC Joint Annual Meeting, Vancouver, BC, Canada
- 2018: **Foquet, B.** and Song, H. The molecular basis of locust phase polyphenism in a phylogenetic framework. Ecological integration Symposium, Texas A&M University, TX, USA
- 2018: **Foquet, B.** and Song, H. The molecular basis of density-dependent phase polyphenism in a molecular framework. International conference Global Locust Initiative, Tempe, AZ
- 2017: **Foquet, B.** and Song, H. Revealing the molecular architecture of locust phase polyphenism using RNAi on the Central-American locust (*Schistocerca piceifrons*) and non-swarmling relatives. Entomological Society of America Annual Meeting, Denver, CO, USA
- 2017: **Foquet, B.** and Song, H. *De novo* transcriptomic analysis of density-dependent phase plasticity in a locust species (*Schistocerca piceifrons*) and two closely related non-swarmling grasshoppers. Student research week, Texas A&M University, TX, USA
- 2016: **Foquet, B.** and Song, H. *De novo* transcriptomic analysis of density-dependent phase plasticity in a locust (*Schistocerca piceifrons*) and two closely related nonswarmling grasshoppers. XXV International Conference of Entomology, Orlando, FL, USA.
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Presentations and posters contributed by mentored undergraduate students and collaborators (Undergraduate students under my supervision are underlined)

- 2019: Little, D., **Foquet, B.**, Song, H. Analysis of phase-related behavior in the locust *Schistocerca piceifrons* (Orthoptera: Acrididae: Cyrtacanthacridinae). Ecological integration symposium, Texas A&M University, TX, USA
- 2019: Pocco, M.E., **Foquet, B.**, Cigliano, M.M., Nieves, E.L., Carlos E. Lange, C.E., Song, H. Phenotypic plasticity in the South american locust *Schistocerca cancellata* (Acrididae). XIII International Congress of Orthopterology, Agadir, Morocco
- 2018: Wang, H., Ravenscroft, T.A., **Foquet, B.**, Song, H., Bellen, H., Rasband, M., Dierick, H., Gabbiani, F. Expression of sodium channel in the developing grasshopper brain and *Drosophila* Society for neuroscience annual meeting, San Diego, CA, USA
- 2018: Little, D., **Foquet, B.**, Song, H. Analysis of phase-related behavior in the locust *Schistocerca piceifrons* (Orthoptera: Acrididae: Cyrtacanthacridinae). ESA, ESC, and ESBC Joint Annual Meeting, Vancouver, BC, Canada
- 2018: Deluna, A.C., **Foquet, B.** and Song, H. Quantitative comparison of color and morphology between phases in the Central American locust, *Schistocerca piceifrons* (Orthoptera: Acrididae). ESA, ESC, and ESBC Joint Annual Meeting, Vancouver, BC, Canada
- 2018: Deluna, A.C., **Foquet, B.** and Song, H. POSTER: Density-dependent Phase Polyphenism in *S. piceifrons*: A Color Analysis. Southwestern branch meeting Entomological Society of America, Albuquerque, NM, USA
- 2018: Little, D., **Foquet, B.** and Song, H. A Multiple Regression Model to Predict Phases of *Schistocerca piceifrons*. Student Research Week, College Station, TX, USA
- 2018: Franklin, S., Foquet, B. and Song, H. NSF REU: Analysis of Actin Knockdown in the Central-American Locust *Schistocerca piceifrons* (Orthoptera: Acrididae), using RNA Interference. LAUNCH Undergraduate research symposium, College Station, TX, USA
- 2018: Deluna, A.C., **Foquet, B.** and Song, H. Density-dependent Phase Polyphenism in *S. piceifrons*: A Color Analysis. EGSO Mentorship in Entomology Symposium, College Station, TX, USA
- 2018: Little, D., **Foquet, B.** and Song, H. A Multiple Regression Model to Predict Phases of *Schistocerca piceifrons*. EGSO Mentorship in Entomology Symposium, College Station, TX, USA
- 2017: Kilpatrick, S., **Foquet, B.**, Little, D., Gotham, S. and Song, H. Density-dependent phenotypic plasticity of non-swarving *Schistocerca* (Orthoptera: Acrididae). Entomological Society of America Annual Meeting, Denver, CO, USA
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Organized Symposia/Organized Meetings

- 2020 (anticipated): Symposium: "Polyneoptera for our Planet" **Foquet, B.**, Woller, D.A., Song, H. International Congress of Entomology, Helsinki, Finland
- 2019 (anticipated): Organized Meeting: Orthopteroids: Small Orders, Big Ideas. **Foquet, B.**, Woller, D.A., Song, H. Entomological Society of Entomology Annual Meeting, St Louis, MO, USA
- 2018: Organized Meeting: Orthopteroids: Small Orders, Big Ideas. **Foquet, B.**, Woller, D.A., Song, H. ESA, ESC, and ESBC Joint Annual Meeting, Vancouver, BC, Canada

Awards

- 2019 ESA 2019 Departmental travel funds, Entomology department Texas A&M University (600 USD)
- 2019 OGAPS travel award, Office of Graduate and Professional Studies Texas A&M University (750 USD)
- 2018 ESA 2018 Departmental travel funds, Entomology department Texas A&M University (600 USD)
- 2018 Ted Cohn Research Fund, Orthopterists' Society (1,500 USD).
- 2018 2018 Spring Travel Award, Entomology Graduate Student Organization Texas A&M University (250 USD).
- 2018 3rd Place Graduate Oral Presentation, Ecological Integration Symposium Texas A&M University (50 USD)

Field experience

- 2009-2015 Belgium / Netherlands (Inventory of Orthoptera)
- 2015 Yucatan Peninsula, Mexico (Collecting Orthoptera).
- 2016 Texas (Entoblitz), Mozambique (Collecting Orthoptera), Costa Rica (Collecting Orthoptera).
- 2017 Texas (Entoblitz), Central Mexico (Collecting Orthoptera)
- 2018 Yucatan Peninsula, Mexico (Radio telemetry in locusts), South-Africa, Namibia, Ethiopia (Collecting Orthoptera)
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Manuscript review service

2019: Journal of insect physiology (1)

2019: Scientific reports (1)

Undergraduate students mentored

Tyler Lowry (2018 – 2019)

Michael Curtis (2018 – 2019)

Sam Franklin (Summer 2018)

Aria Deluna (2017 – 2018)

Drew Little (2016 – present)

Charmelle Williams (2016 – 2018)

Teaching

2019 Teaching assistant Lab 'Veterinary Entomology' (ENTO209), Spring and Fall, 1 section

2019 Teaching assistant Lab 'Insect Biodiversity' (ENTO301), Fall, 2 sections

2019 Teaching assistant Lab 'Evolution of Insect Structure' (ENTO305), Fall, 2 sections

Community outreach and other services

2019 Boonville Days, Brazos Museum of National History, College Station, TX, USA

2019 Darwin Day at Texas A&M University, College Station, TX, USA

2018 'Bug Unit' at Forest Ridge Elementary School, College Station, TX, USA

2018 Educational booth 'Monarch March Event', Lick Creek park, College Station, TX, USA

2018 Bug booth at Bioblitz, Lick Creek Park, College Station, TX, USA

2018 'Bug Unit' at Family Fun Night, Creekview Elementary school, TX, USA

2017 College Station city meeting Monarch butterfly conservation initiative, TX, USA

2017 Bug booth at Bioblitz, Lick Creek Park, College Station, TX, USA

2017 EGSO booth at ESA, Denver, CO, USA

2014-present: Volunteer in Saltabel, the Belgian study group of Orthoptera
Focus on organizing and guiding excursions, and inventorying/monitoring programs

2014-present: Validator for Orthoptera on 'Waarnemingen.be' (site for Belgian nature observation)
Focus on validation of observations of Belgian Orthoptera
