

# James B Barnett

Department of Psychology, Neuroscience & Behaviour  
McMaster University  
1280 Main Street West  
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ON, Canada

## CURRENT POSITION

2019-Present **Postdoctoral Fellow**  
Department of Psychology, Neuroscience & Behaviour  
McMaster University, ON, Canada  
Project: Amphibian visual and behavioural ecology  
Funding: NSERC (Canada 150)  
PI: Professor Jonathan Pruitt

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## POSTDOCTORAL POSITIONS

2018 **Postdoctoral Fellow**  
Redpath Museum  
McGill University, QC, Canada  
Project: Visual ecology and anthropogenic change  
Funding: FRQ-NT  
PI: Professor David M. Green

2016-2017 **Postdoctoral Fellow**  
Redpath Museum  
McGill University, QC, Canada  
Project: Behavioural and visual ecology of amphibians  
Funding: NSERC  
PI: Professor David M. Green

## EDUCATION

2012-2016 **PhD**  
School of Biological Sciences  
University of Bristol, UK  
Thesis: Camouflage of conspicuous signals  
Supervisors: Professor Innes C. Cuthill & Dr Nicholas E. Scott-Samuel

2011-2012 **MSc by Research**  
School of Biological Sciences  
University of Bristol, UK  
Thesis: Distance-dependent defensive colouration  
Supervisor: Professor Innes C. Cuthill

2008-2011 **BSc (Hons) Zoology** (1<sup>st</sup> Class – 4.0 GPA equivalent)  
School of Biological Sciences  
University of Reading, UK  
Thesis: The anuran species diversity associated with human environments in Selangor, Malaysia  
Supervisor: Professor Mark D. E. Fellowes

**TEACHING**2017-2018 **Course Lecturer**Department of Biology  
McGill University, QC, Canada

Undergraduate courses: conservation biology (BIOL 465) and herpetology (BIOL 427).

2016-2017 **Research project advisor**Redpath Museum  
McGill University, QC, Canada

Undergraduate projects: camouflage, masquerade, and aposematism in Fowler's toads.

2011-2016 **Teaching assistant & research project advisor**School of Biological Sciences  
University of Bristol, UK

University courses: vertebrate dissection, laboratory techniques, early life forms, animal behaviour, botanical diversity, evolutionary biology, postgraduate statistics, and the residential animal behaviour field trip to Lundy Island (UK).

School groups: invertebrate dissection, and field ecology.

Undergraduate projects: distance-dependent defensive colouration (camouflage and aposematism).

MSc project: detection and recognition distance in defensive colouration.

BBC Natural History: species identification (snakes, 2013; amphibians, 2015).

**FUNDING & AWARDS**2018 **Programme de Bourses d'Excellence pour Étudiants Étrangers**

Postdoctoral fellowship \$35000 CAD FRQ-NT, QC, Canada

2015 **Travel Grant**

Behaviour 2015 travel grant £550 GBP Bristol University Alumni, UK

2014 **ISBE Travel Grant**

ISBE 2014 travel grant \$2500 USD ISBE, UK

2014 **Research Grant**

Tropical research grant €4700 EUR CNRS (Labex CEBA), France

2013 **Trosciano Prize for Outstanding Excellence in Presenting Research**

Award for conference presentations £100 GBP University of Bristol, UK

2013 **Geoffrey J. Burton Memorial Award**

Conference travel grant £750 GBP The AVA, UK

2012 **Postgraduate Research Scholarship**

PhD research funding £55000 GBP University of Bristol, UK

2011 **Colin Morely – Glyn Williams Prize in Zoology**

Graduating with top degree in zoology £20 GBP University of Reading, UK

2010 **Part 2 Achievement Prize**

Finishing top of class undergraduate second year £1000 GBP University of Reading, UK

2008 **Entrance Scholarship**

Exceeding entrance requirements £2000 GBP University of Reading, UK

**CONFERENCE PRESENTATIONS**

2018	<b>Biology Seminar Series</b>	Talk	Carleton University, Canada
2018	<b>Canadian Society for Ecology &amp; Evolution</b>	Talk	University of Guelph, Canada
2018	<b>CamoCon 2018</b>	Talk (Lightning)	University of Bristol, UK
2017	<b>Organismal Seminar Series</b>	Talk	McGill University, Canada
2016	<b>Redpath Museum Symposium</b>	Talk	McGill University, Canada
2016	<b>Canadian Herpetological Society Annual Conference</b>	Talk	Toronto Zoo, Canada
2016	<b>Anti-Predator Colouration Symposium</b>	Talk	University of Exeter, UK
2015	<b>CamoCon 2015</b>	Poster	University of Liverpool, UK
2015	<b>Behaviour 2015</b>	Talk	Cairns, Australia
2015	<b>Natural Systems Poster Session</b>	Poster	University of Bristol, UK
2014	<b>ISBE 2014</b>	Talk	New York, USA
2014	<b>BVI Young Researchers Colloquium</b>	Poster	University of Bristol, UK
2014	<b>Experimental Psychology Postgraduate Conference</b>	Talk	University of Bristol, UK
2014	<b>Amphibian Conservation Research Symposium</b>	Poster	ZSL, UK
2014	<b>Natural Systems Poster Session</b>	Poster	University of Bristol, UK
2014	<b>Festival of Postgraduate Research</b>	Poster	Bristol Doctoral College, UK
2013	<b>Biological Sciences Postgraduate Symposium</b>	Poster	University of Bristol, UK
2013	<b>Behaviour 2013</b>	Talk	Newcastle-Gateshead, UK
2013	<b>BVI Young Researchers Colloquium</b>	Poster	University of Cardiff, UK
2013	<b>Experimental Psychology Postgraduate Conference</b>	Talk	University of Bristol, UK
2013	<b>Round Table Talks</b>	Talk	University of Bristol, UK
2012	<b>BVI Young Researchers Colloquium</b>	Talk	University of Bristol, UK
2012	<b>Natural Systems Poster Session</b>	Poster	University of Bristol, UK
2012	<b>Camouflage Workshop</b>	Talk	University of Bristol, UK

**CONFERENCE HOSTING**

2016	<b>Anti-predator Colouration Symposium</b>	Discussion Organiser	University of Exeter, UK
2014	<b>ISBE 2014</b>	Symposium organiser	New York, USA
2013	<b>Round Table Talks</b>	Host	University of Bristol, UK
2013	<b>CamoCon 2013</b>	Discussion leader	University of Bristol, UK

**RESEARCH SKILLS**

<b>Fieldwork</b>	<i>Organising and leading fieldwork with a variety of experimental paradigms.</i>
2018	Laurentides, QC, Canada
2017-2018	Long Point, ON, Canada
2017	Bocas del Toro, Panama
2014-2015	Nouragues, French Guiana
2011-2016	England, United Kingdom
2010	Selangor, Malaysia
2008	Kalimantan, Indonesia

**Programming**

MATLAB	image analysis, visual modelling, population modelling, and psychophysics
R	statistical analysis and graphical outputs

**PUBLICATIONS**

- Barnett JB**, Michalis C, Scott-Samuel NE & Cuthill IC. 2018. Camouflage and aposematism in the dyeing poison frog (*Dendrobates tinctorius*, Dendrobatidae). *Proceedings of the National Academy of Sciences* **115**: 6416-6421.
- Barnett JB**, Cuthill IC & Scott-Samuel NE. 2018. Pattern blending: the case of the cinnabar moth caterpillar (*Tyria jacobaeae*, Erebidae). *Royal Society Open Science* **5**: 171396.
- Barnett JB**, Cuthill IC & Scott-Samuel NE. 2017. Distance-dependent pattern blending can camouflage salient aposematic signals. *Proceedings of the Royal Society B* **284**: 20170128.
- Barnett JB**, Redfern AS, Bhattacharyya-Dickson R, Clifton O, Courty T, Ho T, Hopes A, McPhee T, Merrison K, Owen R, Scott-Samuel NE & Cuthill IC. 2016. Stripes for warning and stripes for hiding: spatial frequency and detection distance. *Behavioral Ecology* **28**: 373-381.
- Barnett JB**, Scott-Samuel NE & Cuthill IC. 2016. Aposematism: balancing salience and camouflage. *Biology Letters* **12**: 20160335.
- Barnett JB**, Michalis K, Scott-Samuel NE & Cuthill IC. 2016. Conspicuous warning signals may provide camouflage at a distance for aposematic species. *Perception* **45**: 363.
- Barnett JB** & Cuthill IC. 2014. Distance-dependent defensive coloration. *Current Biology* **24**: R1157-R1158.
- Barnett JB**, Benbow RL, Ismail A & Fellowes MDE. 2013. Abundance and diversity of anurans in a regenerating former oil palm plantation in Selangor, Peninsular Malaysia. *Herpetological Bulletin* **125**: 1-9.
- Barnett JB**. 2011. Pigmentation loss and regeneration in a captive wild type axolotl, *Ambystoma mexicanum*. *Herpetological Bulletin* **115**: 17-18.

**PUBLICATIONS (Submitted and Pending Submission)**

- Michalis C, **Barnett JB**, Scott-Samuel NE & Cuthill IC. Polymorphic background matching in the leaf litter toad *Rhinella* c.f. *margaritifera* (Bufonidae). *In prep.*
- Varela BJ, Green DM, Ibáñez R, Lesbarrères D & **Barnett JB**. Amphibian population collapse revisited: amphibian decline in the highlands of western Panama, 20 years on. *In prep.*

**POPULAR ARTICLES**

- Barnett JB**. 2013. Camouflage and the Amphibia. *FrogLog* **107** 12-14.
- Barnett RJ & **Barnett JB**. 2009. Bristol and district reptiles and amphibian report, 2009. *Nature in Avon: Proceedings of the Bristol Naturalists Society* **69**: 49.

**REFERENCES AVAILABLE ON REQUEST**