

Atiyo Ghosh  
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The Netherlands

Monday October 24, 2011

Dear Dr. Swanson,

I write to ask that you consider me to fill the position you have available for a post-doctoral researcher.

I am currently entering the last stages of my Ph. D. in Mathematical Biology at Leiden University, using stochastic models in ecological contexts. Previously I completed my Master's and Bachelor's degrees in Physics from the University of Cambridge, which required me to be well-versed with partial differential equations. In addition, I have programming experience in several programming languages, and have also been working in an interdisciplinary environment for the past four years. I hope these experiences would stand me in good stead for your project.

My Ph. D. is still ongoing. I hope to submit my thesis in the middle of January, so, should I be accepted, I would only be able to start after that.

Please find attached a copy of my C.V., as well as contact details for three referees.

Thanks for your time.

Yours sincerely,

Atiyo Ghosh

## **Referees for Atiyo Ghosh**

Dr Patsy Haccou (supervisor)  
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# Atiyo Ghosh

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CONTACT INFORMATION	Department of Environmental Sciences (CML) Einsteinweg 2, Leiden 2333 CC, The Netherlands	office: +31 715277474 mobile: +31 625534889 e-mail: a.ghosh@biology.leidenuniv.nl
RESEARCH INTERESTS	Stochastic population dynamics. Branching processes.	
EDUCATION	<b>Leiden University,</b> Leiden, The Netherlands <i>Ph.D. in Mathematical Biology</i> <ul style="list-style-type: none"><li>• Expected graduation date: March 2012</li><li>• Supervisor: Patsy Haccou Promotor: Hans Metz</li><li>• Thesis: Measuring Introgression Risks with Hazard Rates (Title TBC)</li><li>• Relevant courses: Theoretical Ecology, Measure Theoretic Probability, Stochastic Processes</li><li>• Workshops: The Mathematics of Invasions in Ecology and Epidemiology, Banff, Canada, 2009. (attendee). Trangenens Going Wild? Risk Assessment of Transgene Introgression from Crops in Wild Relatives, Leiden, the Netherlands, 2011 (co-organizer).</li></ul>	2008 – present
	<b>University of Cambridge,</b> Homerton College, Cambridge, United Kingdom <i>B.A.(Hons), M.Sci.(Hons) in Natural Sciences (Physics)</i> <ul style="list-style-type: none"><li>• Relevant courses: Evolution and Behaviour, Biophysics, Information Theory</li><li>• Master’s project at the surface physics group on developing a detector to count helium ions</li></ul>	2003 – 2007
	<b>Harrow School,</b> London, United Kingdom <ul style="list-style-type: none"><li>• 5 As in A-levels (Mathematics, Further Mathematics, Biology, Chemistry, Physics).</li></ul>	1997-2002
PUBLICATIONS	Ghosh, A., Serra, M.C., Haccou, P., “Hazard rates of introgression in random environments” <i>In prep. for submission to Theor. Popul. Biol</i>	
	Ghosh, A., Meirmans, P.G., Haccou, P., “Hazard rates as a measure of invasion risk across multiple modeling frameworks” <i>In prep. for submission to Proc. R. Soc. B</i>	
	Ghosh, A., Serra, M.C., Haccou, P., “Quantifying time-inhomogeneous stochastic introgression processes with hazard rates”, <i>Theor. Popul. Biol</i> , Submitted	
	Ghosh, A., Haccou, P., “Quantifying stochastic introgression processes with hazard rates”, <i>Theor Popul Biol</i> , Vol. 77, No. 3, pp. 171-180, 2010.	
SELECTED PRESENTATIONS	Mathematical Models in Ecology and Evolution, Groningen, The Netherlands <i>Quantifying Introgression Risks in Random Environments with Hazard Rates</i>	August 2011
	Netherlands Annual Meeting of Theoretical Biologists, Schoorl, The Netherlands <i>Quantifying Introgression Risks with Hazard Rates in Random Environments</i>	May 2011
	Workshop on Branching Processes and Derived Processes, Luminy, France <i>Hazard Rates of Introgression in Random Environments</i>	April 2011
	Netherlands Annual Ecology Meeting, Lunteren, The Netherlands <i>Quantifying Stochastic Introgression Risks with Hazard Rates</i>	February 2011
	Institute of Mathematical Statistics, 73rd Annual Meeting, Gothenburg, Sweden <i>Quantifying Introgression Risks by Hazard Rates</i>	August 2010
	Netherlands Annual Meeting of Theoretical Biologists, Schoorl, The Netherlands <i>Quantifying Introgression Risks with Hazard Rates</i>	April 2010
	Netherlands Annual Ecology Meeting, Lunteren, The Netherlands <i>Quantifying Stochastic Introgression Processes</i>	February 2010
	Meeting on Branching Processes and Applications, Braga, Portugal <i>Branching Processes, Hazard Rates and Introgression</i>	April 2009

TEACHING  
EXPERIENCE

**Leiden University**, Leiden, The Netherlands

*Teaching assistant*

Organized examples classes and tutoring for a course in mathematical modeling for undergraduate biologists, based on material from Ellner and Guckenheimer's "Dynamic Models in Biology".

*Supervisor*

Supervised Marije Stoops's Bachelor's Project which used branching processes as a means to predict the risk of invasion of genes from wild rice into their weedy relatives.

PROGRAMMING  
LANGUAGES

R, Matlab, Fortran, L<sup>A</sup>T<sub>E</sub>X

REFEREES

**Hans Metz**

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e-mail: *available on request*

**Patsy Haccou**

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**Tom de Jong**

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**Klaas Vrieling**

Associate Professor

Leiden University

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