

# Daniel Andrés Díaz-Pachón

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## Education

<b>Biola University</b> <i>M.A. New Testament</i>	<b>La Mirada, California</b> 2021–
<b>Universidade de São Paulo</b> <i>Ph.D. Probability</i>	<b>São Paulo, Brasil</b> 2005–2009
<b>Universidad Nacional de Colombia</b> <i>B.S. Statistics (Minors: Mathematics, Biostatistics)</i>	<b>Bogotá, Colombia</b> 1998–2004
<b>Facultad de Teología y Estudios Religiosos</b> <i>B.A. Theology</i>	<b>Bogotá, Colombia</b> 1999–2005

## Experience

<b>Academic</b>	
<b>Research Assistant Professor</b> <i>Division of Biostatistics - University of Miami</i>	<b>Miami, Florida</b> 2015–2021
<b>Postdoctoral Research Associate</b> <i>Division of Biostatistics - University of Miami</i>	<b>Miami, Florida</b> 2011–2015
<b>Teaching Assistant</b> <i>Instituto de Matemática e Estatística - Universidade de São Paulo</i>	<b>São Paulo, Brasil</b> 2007–2007
<b>Lecturer in Statistics</b> <i>Instituto Politécnico Gran Colombiano</i>	<b>Bogotá, Colombia</b> 2004
<b>Industry</b>	
<b>Risk Analyst</b> <i>ACCION International</i>	<b>Bogotá, Colombia</b> 2008
<b>Consultant</b> <i>Universidad Nacional de Colombia</i>	<b>Bogotá, Colombia</b> 2003

## Edition and translation.....

### Book translator and editor

*Freelance*

2004–2013

More than 30 books translated or edited from English to Spanish for 3 different Publishing Houses (Vida Zondervan, Portavoz, and CLIE).

## Languages

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**Spanish:** Native

**English:** Fluent

**Portuguese:** Fluent

**Italian:** Basic

**Greek:** Basic

## Certifications

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- **Curso anual de novela.** Annual course on creative writing. *Escuela Cursiva*.
- **Taller de poesía con Carlos Pardo.** Four-months poetry course. *Escuela Cursiva*.

## Interests

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Creative writing and poetry.

Crossfit.

## Talks and presentations

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*Active Information and some applications.*

Colloquium, Department of Mathematics, Florida International University.

Miami, FL, USA. October 24th, 2019.

*Allocations: Some results and some open problems.*

Probability Workshops, Department of Statistics, Oxford University.

Oxford, England. June 13, 2016.

*On the explanatory power of Principal Components.*

XIII Latin American Congress of Probability and Statistics (CLAPEM).

Cartagena, Colombia. September 25, 2014.

*Principal Components Analysis and Bump Hunting using PRIM.*

Biostatistics Seminar, Biostatistics Division, University of Miami.

Miami, FL, USA. September 14, 2013.

*Optimization of PRIM under normality.*

Sco 2013. Politecnico di Milano.

Milan, Italy. September 10, 2013.

*Optimization of PRIM under normality.*

Joint Statistical Meetings.

Montreal, Canada. August 5, 2013.

*Allocations: What they are and some open problems.*

Graduate Seminar, Department of Mathematics, University of Miami.

Miami, FL, USA. March 30, 2012.

*Grandes desvíos en el matrimonio estable de Poisson y Lebesgue con apetitos aleatorios.*

Statistics Seminar, Statistics Department, Universidad del Valle.

Cali, Colombia. May 10, 2011.

*Large deviations for the stable marriage of Poisson and Lebesgue with random appetites.*

Stochastic Processes Seminar, Mathematics Department, Universidad de los Andes.

Bogotá, Colombia. September 22, 2010.

*Tail bounds for the stable marriage of Poisson and Lebesgue with random appetites.*

Seminar of theory and methods, Statistics Department, Universidad Nacional de Colombia.

Bogotá, Colombia. September 6, 2010.

*Some properties of allocations with random appetites (Poster).*

13th Brazilian Probability School.

Maresias, SP, Brazil. August 2–8, 2009.

*Percolación para asignaciones estables con apetitos aleatorios.*

Stochastic Processes Workshop, Mathematics Department, Universidad de los Andes.

Bogotá, Colombia. April 9, 2008.

*Percolación para el matrimonio estable de Poisson y Lebesgue con apetitos aleatorios.*

Seminar of theory and methods, Statistics Department, Universidad Nacional de Colombia.

Bogotá, Colombia. March 30, 2008.

*Hipótesis lineales sobre medias para experimentos de franjas en parcelas divididas.*

IX Latin American Congress of Probability and Statistics (CLAPEM).

Punta del Este, Uruguay. March 22–26, 2004.

## Publications

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### Journal articles.....

10. **Daniel Andrés Díaz-Pachón**, Ola Hössjer, and Robert J. Marks II. Is cosmological tuning fine or coarse? *Under review*, 2021. [Preprint](#).
9. Tianhao Liu, **Daniel Andrés Díaz-Pachón**, J. Sunil Rao, and Jean-Eudes Dazard. Mode hunting using pettiest component analysis. *Under review*, 2021. [Preprint](#).
8. **Daniel Andrés Díaz-Pachón** and J. Sunil Rao. A simple correction for COVID-19 sampling bias. *J Theor Biol*, 512:110556, 2021. [Preprint](#).
7. **Daniel Andrés Díaz-Pachón** and Robert J. Marks II. Active Information Requirements for Fixation on the Wright-Fisher Model of Population Genetics. *BIO-Complexity*, 2020(4):1–6, 2020. [Preprint](#).
6. **Daniel Andrés Díaz-Pachón** and Robert J. Marks II. Generalized active information: Extensions to unbounded domains. *BIO-Complexity*, 2020(3):1–6, 2020. [Preprint](#).
5. **Daniel Andrés Díaz-Pachón**, Juan P. Sáenz, and J. Sunil Rao. Hypothesis testing with active information. *Stat & Probab Letters*, 161:108742, 2020. [Preprint](#).
4. **Daniel Andrés Díaz-Pachón**, Juan P. Sáenz, J. Sunil Rao, and Jean-Eudes Dazard. Mode hunting through active information. *Appl Stochastic Models Bus Ind*, 35(2):376–393, 2019. [Preprint](#).
3. **Daniel Andrés Díaz-Pachón**, Francisco J. P. Zimmermann, and Luis Alberto López-Pérez. F tests for the strip-split plot design. *Revista Brasileira de Biometria*, 34(2):279–303, 2016. [Preprint](#).
2. **Daniel Andrés Díaz-Pachón**. Percolation for the stable marriage of Poisson and Lebesgue with random appetites. *Stochastics*, 85(2):252–261, 2013. [Preprint](#).
1. **Daniel Andrés Díaz-Pachón**. A note on large deviations for the stable marriage of Poisson and Lebesgue with random appetites. *J Theor Probab*, 25(1):77–91, 2012. [Preprint](#).

### Book chapters.....

1. **Daniel Andrés Díaz-Pachón**, Jean-Eudes Dazard, and J. Sunil Rao. Unsupervised Bump Hunting Using Principal Components. In S. Ejaz Ahmed, editor, *Big and Complex Data Analysis: Methodologies and Applications*, pp. 325–345. Springer International Publishing, 2017. [Preprint](#).

### Dissertations.....

2. **Daniel Andrés Díaz-Pachón**. Advisor: Serguei Popov. Algumas propriedades de alocações para o processo pontual de Poisson. Doctoral dissertation (Portuguese). Instituto de Matemática e Estatística, Universidade de São Paulo, Brazil, 2009. [Tesis](#).
1. **Daniel Andrés Díaz-Pachón**. Advisors: Luis Alberto López-Pérez, Francisco J. P. Zimmermann. Hipótesis lineales sobre medias para experimentos de franjas en parcelas divididas. Undergraduate dissertation (Spanish). Departamento de Estadística, Universidad Nacional de Colombia, 2004. [Tesis](#).

## References

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### **J. Sunil Rao**

Director, Division of Biostatistics,  
Department of Public Health Sciences, University of Miami.  
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Email: JRao@miami.edu

### **Robert J. Marks II**

Distinguished Professor,  
Electrical & Computer Engineering, Baylor University.  
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Email: Robert\_Marks@baylor.edu