Johanna G. Nešlehová, PhD, PStat

Curriculum Vitæ

Personal data

Born in Praha (Czech Republic), July 26, 1977
Czech citizen and permanent resident of Canada
Married (C. Genest), one child (Richard)

Fluent in Czech, English, German
Working knowledge of Norwegian
Basic knowledge of French

Education

Vordiplom, Mathematics and Computer Science
Univerzita Karlova v Praze (Praha, Czech Republic)
and Universität Hamburg, Hamburg (Germany) 1999

Diploma, Mathematics and Computer Science
Universität Hamburg, Hamburg (Germany) 2000

PhD, Mathematics (DrRerNat), *Summa Cum Laude*
Carl von Ossietzky Universität, Oldenburg (Germany) 2004

Awards and distinctions

Professional Accreditation (PStat #168), Statistical Society of Canada, 2015
Elected Member, International Statistical Institute, 2011
DAAD Award for Foreign Students
Carl von Ossietzky Universität, Oldenburg (Germany) 2001

Fellowships

Ferdinand und Emma Beit Stiftung, Universität Hamburg, 1998–99
Robert Vogel Scholarship, Universität Hamburg, 1997–98

Record of employment

Associate Professor, McGill University, Montréal (QC) 2012–
Assistant Professor, McGill University, Montréal (QC) 2009–12

Heinz Hopf Lecturer, ETH Zürich (Switzerland) 2006–09
Research Fellow, RiskLab, ETH Zürich (Switzerland) 2004–06

Other positions

Visiting Professor, Forschungsinstitut für Mathematik, ETH Zürich, 2013
Adjunct Professor, Université Laval, Québec (QC) 2008–
Research Fellow, McLean Hospital, Harvard Medical School, Boston (MA) 2006

Membership in professional societies

Czech Statistical Society (CSS), Institute of Mathematical Statistics (IMS), International Statistical Institute (ISI), Statistical Society of Canada (SSC)

Individual research grants

Discovery Grant, Natural Sciences and Engineering
Research Council of Canada, 31,000 CDN per year, 2016–21

Discovery Grant, Natural Sciences and Engineering
Research Council of Canada, 15,000 CDN per year, 2010–15
Supplement 5,000 CDN per year, 2012–15

Subvention pour nouveaux chercheurs, Fonds de recherche du Québec
— Nature et technologies, 20,000 CDN per year, 2010–12

Startup Grant, McGill University, 40,000 CDN in total, 2010–13
Research Grant, Swiss RE, 10,000 CHF per year, 2006–09

Team research grants

Collaborative Research Team Project, Canadian Statistical Sciences
Institute, 200,000 CDN, 2014–17
Principal investigators: C. Genest and L.-P. Rivest

Projet de recherche en équipe, Fonds de recherche du Québec
— Nature et technologies, 72,000 CDN per year, 2014–17
Principal investigator: C. Genest

Projet de recherche en équipe, Fonds de recherche du Québec
— Nature et technologies, 59,000 CDN per year, 2011–14
Principal investigator: C. Genest

Editorial work

Associate Editor, *Statistics & Risk Modeling*, 2015–
Associate Editor, *Journal of Multivariate Analysis*, 2013–
Associate Editor, *STAT*, 2012–
Associate Editor, *Kybernetika*, 2012–

Guest Editor, Special Issue of the *Journal of Multivariate Analysis*, 2012
Guest Editor, Special Issue of the *Journal of Probability and Statistics*, 2010

Service to the profession

Chair, Pierre Robillard Award Committee, SSC, 2011–13
Member, Committee on New Researchers, IMS, 2012–15
Member, CJS Award Committee, SSC, 2013–16
IMS Rep, Joint Committee on Women in the Mathematical Sciences, 2014–16

Meeting organization

Chair, Local Organizing Committee,
IMS New Researchers Meeting, Montréal, 2013

Member, Scientific Committee, Workshop on Copula Modeling and Dependence (Montréal, 2011), 7th Conference on Multivariate Distributions with Applications (Maresias, Brazil, 2010), 36th International ASTIN Colloquium and 15th International AFIR Colloquium (Zürich, 2005)

Member, Local Organizing Committee, 4th German Open Conference on Probability and Statistics (Hamburger Stochastik Tage), Hamburg, 2000

Invited session organizer, 8th World Congress in Probability and Statistics (Istanbul, 2012), 40th Annual Meeting of the Statistical Society of Canada (Guelph, 2012)

Refereeing

External reviewer for 4 Discovery Grant applications to the Natural Sciences and Engineering Research Council of Canada

Referee for 63 manuscripts submitted to 32 different journals in probability, statistics, actuarial science, finance, hydrology, and operations research

Invited and contributed talks in seminars and meetings

Over 50 invited lectures and 8 contributed talks given in meetings and universities in 15 different countries (Austria, Belgium, Brazil, Canada, Czech Republic, Estonia, France, Germany, Italy, Mexico, Netherlands, Norway, Switzerland, United Kingdom, USA).
For additional details, please refer to http://www.math.mcgill.ca/neslehova/.

Undergraduate teaching

At McGill: Honors Probability (3), Statistics (2)

At ETH: Quantitative Risk Management I (3) and II (1)

At Universität Oldenburg: Calculus and Linear Algebra (2), Precalculus (4)

Graduate teaching

At McGill: Extreme Value Theory (1), Generalized Linear Models (1), Mathematical Statistics (4), Nonparametric Statistics (1)

At ETH: Extreme-Value Theory (1), Introduction to Copulas (2), Seminar in Finance and Insurance Mathematics (1), Statistical Models for Count Data (1)

Workshops and continuing education courses

Five workshops (with C. Genest except marked as *) on copula modeling, its implementation in R, with applications in finance and insurance: Québec (2010), Praha (2011), Edinburgh and Paris (2012), Maresias* (Brazil, 2013)

Two workshops (with P. Embrechts when marked *) on extreme-value theory and dependence: Boston* (2005), Stavanger (Norway, 2011)

Two workshops on the "e-stat" project: Hannover and Karlsruhe (2003)

A workshop on quantitative risk management (with P. Embrechts): Bonn (2006)

Completed graduate and postgraduate supervision (* when joint)

Postdoctoral fellows: E.F. Acar* (2010–12), D. Sznajder* (2014)

PhD: N. Ben Ghorbal* (2010, Laval), M.E. Rivera Mancia* (2014, McGill)

MSc: A. Mora* (2006), S. Sigrist* (2006), A. Feidt (2007), N. Larsen* (2008), M. Larsson (2008), M. Beheshty (2009), A. Peters (2009), Y.T. Du* (2012), O.A. Murphy* (2013), I. Grebennikov* (2014), L. Raymond-Belzile (2014), S. Chatelain (2015), J. Roger (2015)

Ongoing supervision

PhD: S. Chatelain* (McGill/Lyon), E. Cormier*, O.A. Murphy*, S. Perreault* (Laval)

Other graduate research trainees

M. Ruppert (Köln, 2010), M.C. Su (Taiwan, 2014)

Undergraduate trainees

N. Keating (2014), C. Campbell (2013), T. St Rose (2013), S. Chatelain (2012), X.S. Shen (2012), J.N. Sjogren (2011), S. Perreault (2011), A. McGillivray (2011), K. Rudd (2011), G. Doyon (2010), Y.T. Du (2010), A. Helfenstein (2008), G. Zonzilos (2008), B. Catalino (2007), V. Peikert (2007)

Summary of publication output

1 book (5 editions)
28 publications in peer-reviewed journals
6 other refereed contributions

7 non-refereed articles in professional journals
2 book reviews
6 widely distributed pedagogical documents

Google Scholar profile and citation patterns at http://scholar.google.ca/citations?user=nQjYZngAAAAJ&hl=en.
Summary: Citations = 1645, h-index: 18, i10-index: 20.

Book

E. Cramer & J. Nešlehová (2012). *Vorkurs Mathematik*. Springer, Berlin, xii + 443 pp. [Five editions to date: 2004, 2005, 2008, 2009, 2012].

Peer-reviewed articles

1. A. Charpentier, A.-L. Fougères, C. Genest & J.G. Nešlehová (2014). Multivariate Archimax copulas. *Journal of Multivariate Analysis*, 126, 118–136.
2. E. Cormier, C. Genest & J.G. Nešlehová (2014). Using B-splines for nonparametric inference on bivariate extreme-value copulas. *Extremes*, 17, 633–659.
3. C. Genest & J.G. Nešlehová (2014). On tests of radial symmetry for bivariate copulas. *Statistical Papers*, 55, 1107–1119.
4. C. Genest & J.G. Nešlehová (2014). A conversation with James O. Ramsay. *International Statistical Review*, 82, 161–183.
5. C. Genest, J.G. Nešlehová & B. Rémillard (2014). On the empirical multilinear copula process for count data. *Bernoulli*, 20, 1344–1371.
6. Y. Du, A. Khalili, J.G. Nešlehová & R.J. Steele (2013). Simultaneous fixed and random effects selection in finite mixture of linear mixed-effects models. *The Canadian Journal of Statistics*, 41, 596–616.
7. Y. Du & J.G. Nešlehová (2013). A moment-based test for extreme-value dependence. *Metrika*, 76, 673–695.
8. C. Genest, J.G. Nešlehová & B. Rémillard (2013). On the estimation of Spearman's rho and related tests of independence for possibly discontinuous multivariate data. *Journal of Multivariate Analysis*, 117, 214–228.
9. E.F. Acar, C. Genest & J. Nešlehová (2012). Beyond simplified pair-copula constructions. *Journal of Multivariate Analysis*, 110, 74–90.
10. C. Genest, J. Nešlehová & J.-F. Quessy (2012). Tests of symmetry for bivariate copulas. *The Annals of the Institute of Statistical Mathematics*, 64, 811–834.
11. C. Genest, I. Kojadinovic, J. Nešlehová & J. Yan (2011). A goodness-of-fit test for bivariate extreme-value copulas. *Bernoulli*, 17, 253–275.
12. C. Genest, J. Nešlehová & N. Ben Ghorbal (2011). Estimators based on Kendall's tau in multivariate copula models. *The Australian and New Zealand Journal of Statistics*, 53, 157–177.
13. C. Genest, J. Nešlehová & J. Ziegel (2011). Estimation in multivariate Archimedean copula models (with discussion). *TEST*, 20, 223–289.
14. M.O. Larsson & J. Nešlehová (2011). Extremal behavior of Archimedean copulas. *Advances in Applied Probability*, 43, 195–216.
15. A. Feidt, C. Genest & J. Nešlehová (2010). Asymptotics of joint maxima for discontinuous random variables. *Extremes*, 13, 35–53.
16. C. Genest, J. Nešlehová & N. Ben Ghorbal (2010). Spearman's footrule and Gini's gamma: A review with complements. *Journal of Nonparametric Statistics*, 22, 937–954.

17. A.J. McNeil & J. Nešlehová (2010). From Archimedean to Liouville copulas. *Journal of Multivariate Analysis*, 101, 1772–1790.
18. N. Ben Ghorbal, C. Genest & J. Nešlehová (2009). On the Ghoudi, Khoudraji, and Rivest test for extreme-value dependence. *The Canadian Journal of Statistics*, 37, 534–552.
19. P. Embrechts, J. Nešlehová & M.V. Wüthrich (2009). Additivity properties for value-at-risk under Archimedean dependence and heavy-tailedness. *Insurance: Mathematics and Economics*, 44, 164–169.
20. C. Genest & J. Nešlehová (2009). Analytical proofs of classical inequalities between Spearman's rho and Kendall's tau. *Journal of Statistical Planning and Inference*, 139, 3795–3798.
21. A.J. McNeil & J. Nešlehová (2009). Multivariate Archimedean copulas, d-monotone functions and ℓ_1-norm symmetric distributions. *The Annals of Statistics*, 37, 3059–3097.
22. Z. Landsman & J. Nešlehová (2008). Stein's lemma for elliptical random vectors. *Journal of Multivariate Analysis*, 99, 912–927.
23. C. Genest & J. Nešlehová (2007). A primer on copulas for count data. *The ASTIN Bulletin*, 37, 475–515.
24. J. Nešlehová (2007). On rank correlation measures for non-continuous random variables. *Journal of Multivariate Analysis*, 98, 544–567.
25. V. Chavez-Demoulin, P. Embrechts & J. Nešlehová (2006). Quantitative models for operational risk: Extremes, dependence and aggregation. *Journal of Banking and Finance*, 30, 2635–2658.
26. J. Nešlehová, P. Embrechts & V. Chavez-Demoulin (2006). Infinite mean models and the LDA for operational risk. *Journal of Operational Risk*, 1, 3–25.
27. D. Pfeifer & J. Nešlehová (2004). Modeling and generating dependent risk processes for IRM and DFA. *The ASTIN Bulletin*, 34, 333–360.
28. D. Pfeifer & J. Nešlehová (2003). Modeling dependence in finance and insurance: The copula approach. *Blätter der Deutschen Gesellschaft für Versicherungs- und Finanzmathematik*, 26, 177–191.

Other refereed contributions

1. C. Genest & J.G. Nešlehová (2014). Modeling dependence beyond correlation. In *Statistics in Action: A Canadian Outlook* (J.F. Lawless, Ed.). Chapman & Hall, London, pp. 59–78.
2. C. Genest & J.G. Nešlehová (2013). Assessing and modeling asymmetry in bivariate continuous data. In *Copulæ in Mathematical and Quantitative Finance*, Proceedings of the Workshop held in Cracow, 10–11 July 2012 (P. Jaworski, F. Durante & W.K. Härdle, Eds.). Springer, Berlin, pp. 91–114.
3. C. Genest & J. Nešlehová (2012). Copula modeling for extremes. In *Encyclopedia of Environmetrics*, Second Edition (A.H. El-Shaarawi & W.W. Piegorsch, Eds.). Wiley, Chichester, vol. 2, pp. 530–541.
4. C. Genest & J. Nešlehová (2012). Copulas and copula models. In *Encyclopedia of Environmetrics*, Second Edition (A.H. El-Shaarawi & W.W. Piegorsch, Eds.). Wiley, Chichester, vol. 2, pp. 541–553.
5. L.J. Powers, J. Nešlehová & D.A. Stephens (2012). Pricing American options in an infinite activity Lévy market: Monte Carlo and deterministic approaches using a diffusion approximation. In *Numerical Methods in Finance* (R.A.

Carmona, P. Del Moral, P. Hu & N. Oudjane, Eds.). Springer Proceedings in Mathematics, vol. 12, pp. 291–321.

6. C. Genest, J. Nešlehová & M. Ruppert (2011). Contribution to the discussion of the paper entitled "Statistical models and methods for dependence in insurance data," by S. Haug, C. Klüppelberg & L. Peng. *Journal of the Korean Statistical Society*, 40, 141–148.

Articles in professional journals

1. C. Genest & J.G. Nešlehová (2013). Königsberg's bridges, Holland's dikes and Wall Street's downfall / Les ponts de Königsberg, les digues de Hollande et la chute de Wall Street. *Liaison*, 27 (3), 56–58.
   [Reprinted in abridged form in the *Bulletin du CRM*, 19 (2), 11 + 14.]
2. J.G. Nešlehová (2013). Luke Bornn: Winner of the Pierre Robillard Award / Lauréat du prix Prix Pierre-Robillard. *Liaison*, 27 (2), 42–43.
3. J.G. Nešlehová & A. Singh (2013). Meeting report: New researchers conference. *IMS Bulletin*, 42 (6), 7.
4. J.G. Nešlehová & A. Singh (2013). Le 15e congrès annuel des jeunes chercheurs de l'IMS. *Bulletin du CRM*, 19 (2), 12.
5. C. Genest & J. Nešlehová (2012). James O. Ramsay: Honorary member of the SSC / Membre honoraire de la SSC. *Liaison*, 26 (3), 24–26.
6. R. Zitikis, E. Furman, A. Necir, J. Nešlehová & M.L. Puri (2010). Editorial for the special issue entitled "Actuarial and Financial Risks: Models, Statistical Inference, and Case Studies." *Journal of Probability and Statistics*, 2010, 3 pp.
7. E. Cramer & J. Nešlehová (2003). (e)Learning the basics of probability. *Proceedings of the International Statistical Institute*, 54th Congress, Berlin.

Book reviews

1. J. Nešlehová (2007). Review of the book entitled "Fractal-Based Point Processes," by S.B. Lowen & M.C. Teich. *Journal of the American Statistical Association*, 102, 382–383.
2. J. Nešlehová (2005). Review of the book entitled "Weibull Models," by P.D.N. Murthy, M. Xie & R. Jiang. *Journal of the American Statistical Association*, 100, 1094.

Educational material

1. C. Genest & J. Nešlehová (2010). *Copulas: Introduction to the Theory and Implementation in R, with Applications in Finance and Insurance.* Course material for the workshop presented at the 38th Annual Meeting of the Statistical Society of Canada, Québec (QC), May 23, 2010.
2. J. Nešlehová (2010). *Copula Modeling and Extreme-Value Theory.* Course material for the workshop presented at the Universitetet i Stavanger, Stavanger (Norway), May 3–8, 2010.
3. P. Embrechts & J. Nešlehová (2006). *Operational Risk.* Course material for the German Financial Supervisory Authority (BaFin), Bonn (Germany), June 19–21, 2006.
4. P. Embrechts & J. Nešlehová (2006). *Extreme Value Theory and Copulæ.* Audio presentation, Henry Stuart Publications, Risk Management Series (S. Satchell, Ed.), Trinity College, Cambridge (England).

5. J. Nešlehová (2005). *Multivariate Extreme Value Theory and Copulas.* Course material for the Federal Reserve Bank of Boston, MA.
6. E. Cramer, K. Cramer & J. Nešlehová (2004). *Multimedia-Based Course and Learning Platform on Descriptive Statistics and Basics of Probability.* Part of the"EMILeA-stat" project; used in mathematics classes at the Gymnasium Osterbek, Hamburg (Germany).

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