

**BIOGRAPHICAL SKETCH**

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NAME Cornélissen Guillaume, Germaine	POSITION TITLE Professor of Integrated Biology and Physiology Director, Halberg Chronobiology Center Coordinator, Study of the BIOSphere and the COSmos		
eRA COMMONS USER NAME (credential, e.g., agency login) germainecg			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
Free University, Brussels, Belgium	B.S.	1969	Physics
Free University, Brussels, Belgium	M.Ed.	1971	Science
Free University, Brussels, Belgium	M.S.	1971	Physics
Free University, Brussels, Belgium	Ph.D.	1976	Physics

Postdoctoral training: Teaching at the Lycee Emile Max 1971-1973

Fellowship IRSIA from 1974 to 1976 to support PhD thesis

Visiting Research Fellow, Chronobiology Laboratories, Dept of Laboratory Medicine and Pathology, University of Minnesota, Summer 1975 and September 1976-April 1979; Research Fellow: May 1979-May 1982

Academic appointments: Research Associate, 1982-1991; Assistant Professor, 1987-1992; Associate Director, 1987-1992; Senior Research Associate, Chronobiology Laboratories, Dept of Laboratory Medicine and Pathology (1992-1993) and Dept of Pediatrics (1994-), University of Minnesota; Director of Biometry, Chronobiology Laboratories, Dept of Laboratory Medicine and Pathology (1992-1993) and Dept of Pediatrics (1994-), University of Minnesota; co-director (1999-2012) and director (2013-), Halberg Chronobiology Center, University of Minnesota; Professor, Integrative Biology and Physiology, University of Minnesota (2006-)

Consulting positions: 1983 and 1995, Consultant, NIH; 1993-1996, Board of Directors, Underlab Project, Pioneer Frontier Explorations and Researches s.r.l. (Ancona, Italy); 1994, Consultant, Procter & Gamble; 1997, Consultant, EPA; 2005-present, Member, Advisory Board, International College of Nutrition & International College of Cardiology; 2010-present, Member, Review Board, European Science Foundation

Honors and Awards: Hoechst Foundation Chronobiology Award, 1983; Member of Sigma Xi Society, 1988; Member, Book Committee, National Chapters of Phi Beta Kappa, 2000-; Profiled in "The Achievements of Chronobiology and Chronomedicine" by NI Aslanyan and SKh Madoyan, 2002; Honorary Member, Cardiff Scientific Society, 2002; Foreign Member, Problem Commission on Chronobiology and Chronomedicine, Russian Academy of Medical Sciences, 2006; Member, Leibniz Society, 2009; Member, International Academy of Science, 2010; joined JAXA/NASA investigators (2015).

Memberships and offices in professional societies: Member of the board of the International Society for Chronobiology, 1985-1995; Secretary of the North American branch of the International Society for Research on Civilization Diseases and the Environment (SIRMCE), 1987-present; Member of the Scientific Council of SIRMCE, 1987-present. Member, Groupe d'Etude des Rythmes biologiques (now Société Francophone de Chronobiologie); International Society for Chronobiology; American Association for the Advancement of Science; American Physical Society; Biometric Society; American Statistical Association; New York Academy of Sciences; American Physiological Society

Scientific activities: Editorial Board, Chronobiologia, 1989-1991; Il Policlinico, 1991-1996; Geronto-Geriatrics, 1999-2012; Neuroendocrinology Letters, 1999-; Journal of Applied Biomedicine, 2006-; World Heart Journal, 2007-2012; Journal of Experimental Therapeutics and Oncology, 2010-. Co-editor, Chronobiologia, 1991-1994; World Heart Journal, 2013-. (Ancona, Italy), 1993-1996; Associate Editor, Proceedings, Workshop on Computer Methods on Chronobiology and Chronomedicine, Tokyo, Sept. 13, 1990, Halberg F., Watanabe H. eds., Medical Review, Tokyo, 1992; Editor "Time structures – chronomes – in child development. Neuroendocrinol Lett 24 (Suppl 1), 2003. Proc Int Interdisciplinary Conference, Munich, Germany, Nov 29-30, 2002; Editor "Chronobiology in Medicine" Proc Symposium dedicated to the 85<sup>th</sup> anniversary of Prof Franz Halberg, Faculty of Medicine, Masaryk University, Brno, Czech Republic, Nov 2004; Guest Editor, The Open Nutraceuticals Journal, 2012; co-Editor-in-Chief, World Heart J (2014-).

Teaching and Mentoring: Grand Rounds, Duke University, Durham, NC, June 1993. Seminars at University of Alberta, Edmonton, Alberta, Canada, September 1996 and June 2005. Faculty, Five Mountains Symposium, 1<sup>st</sup> International Leadership Forum in the 21<sup>st</sup> Century: A Focus on the Woman's Heart, Hawaii Island, HI, March 14-19, 1999. Mentoring: Frank J. Raab II, MS thesis (dentistry), University of Minnesota, 1992; Penny M. Wrbsky, MA thesis (nursing), College of St. Catherine, 1992; Ana Portela Arteaga, doctoral thesis (animal physiology), Universidad Complutense de Madrid, 1993; Mary-Jane Thaela, doctoral dissertation (animal physiology), Lund University, Sweden, 1997; Naoto Burioka, 10-month visiting scholarship from Tottori University, Yonago, Japan, 1999-2000; Dr. Yoshihiko Watanabe, cardiologist, Tokyo, Japan; Dr. Lyazzat Gumarova, Kazakhstan, spent 1 year with us training in chronobiology with focus on cardiology; Cathy Lee Gierke, capstone defended 2013.

Selected publications (total 1182 as of 18 Mar 2015):

- Cornélissen G., Halberg F. Introduction to Chronobiology. Medtronic Chronobiology Seminar #7, April 1994, 52 pp. (Library of Congress Catalog Card #94-060580; <http://revilla.mac.cie.uva.es/chrono>)
- Cornélissen G., Halberg F. Impeachment of casual blood pressure measurements and the fixed limits for their interpretation and chronobiologic recommendations. *Ann. N.Y. Acad. Sci.* 783: 24-46, 1996.
- Cornélissen G, Halberg F, Breus T, Syutkina EV, Baevsky R, Weydahl A, Watanabe Y, Otsuka K, Siegelova J, Fiser B, Bakken EE. Non-photoc solar associations of heart rate variability and myocardial infarction. *J Atmos Solar-Terr Phys* 2002; 64: 707-720.
- Pan WH, Cornélissen G, Halberg F, Kastin AJ. Functional Genomics of Sleep and Circadian Rhythm. Selected Contribution: Circadian rhythm of tumor necrosis factor- $\alpha$  uptake into mouse spinal cord. *J Appl Physiol* 2002; 92: 1357-1362.
- Cornélissen G, Chen CH, Halberg F. Predictive value of blood pressure variability: merits of circadian parameters versus dipping patterns. *N Engl J Med* 2006 [Aug 14]; 355; 8: 850.
- Cornélissen G, Halberg F, Zeman M, Jozsa R, Tarquini R, Perfetto F, Salti R, Bakken EE. Toward a chronome (time structure) of melatonin. In: Pandi-Perumal SR, Cardinali DP, eds. *Melatonin: From Molecules to Therapy*. New York: Nova Biomedical Books; 2007. p. 135-176.
- Cornélissen G, Halberg F, Otsuka K, Singh RB, Chen CH. Chronobiology predicts actual and proxy outcomes when dipping fails. *Hypertension* 2007; 49: 237-239. doi:10.1161/01.HYP.0000250392.51418.64. PMID: PMC2613012.
- Hoogerwerf WA, Hellmich HL, Cornélissen G, Halberg F, Shahinian VB, Bostwick J, Savidge TC, Cassone VM. Clock gene expression in the murine gastrointestinal tract: endogenous rhythmicity and effects of a feeding regimen. *Gastroenterology* 2007; 133: 1250-1260.
- Refinetti R, Cornélissen G, Halberg F. Procedures for numerical analysis of circadian rhythms. *Biological Rhythm Research* 2007; 38 (4): 275-325. <http://dx.doi.org/10.1080/09291010600903692>. PMID: PMC3663600.
- Cornélissen G, Halberg F. Chapter 11: Treatment with open eyes: markers-guided chronotherapeutics. In: Youan BC, ed. *Chronopharmaceutics: Science and Technology for Biological Rhythm-Guided Therapy and Prevention of Diseases*. Hoboken, NJ: Wiley; 2009. p. 257-323.
- Bostwick J, Nguyen D, Cornélissen G, Halberg F, Hoogerwerf WA. Effects of acute and chronic STZ-induced diabetes on clock gene expression and feeding in the gastrointestinal tract. *Mol Cell Biochem* 2010; 338 (1-2): 203-213.
- Cornélissen G. When you eat matters: 60 years of Franz Halberg's nutrition chronomics. *The Open Nutraceuticals Journal* 2012; 5 (Suppl 1-M1): 16.
- Pan W, Hsuchou H, Cornélissen-Guillaume GG, Jayaram B, Wang Y, Tu H, Halberg F, Wu X, Chua SC Jr, Kastin AJ. Endothelial leptin receptor mutation provides partial resistance to diet-induced obesity. *J Appl Physiol* 2012; 112: 1410-1418. doi: 10.1152/jappphysiol.00590.2011. PMID: PMC3331584.
- Halberg F, Powell D, Otsuka K, Watanabe Y, Beaty LA, Rosch P, Czaplicki J, Hillman D, Schwartzkopff O, Cornélissen G. Diagnosing vascular variability anomalies, not only MESOR-hypertension. *Am J Physiol Heart Circ Physiol* 2013; 305: H279-H294. doi: 10.1152/ajpheart.00212.2013.
- Watanabe Y, Halberg F, Otsuka K, Cornélissen G. Toward a personalized chronotherapy of high blood pressure and a circadian overswing. *Clin Exp Hypertens* 2013; 35 (4): 257-266. doi: 10.3109/10641963.2013.780073.
- Cornélissen G. Cosinor-based rhythmometry. *Theoretical Biology and Medical Modelling* 2014; 11: 16. doi:10.1186/1742-4682-11-16. 24 pp.
- Cornélissen G, Watanabe Y, Otsuka K, Halberg F. Influences of space and terrestrial weather on human physiology and pathology. In: Rosch PJ (Ed.) *Bioelectromagnetic and Subtle Energy Medicine*, 2<sup>nd</sup> ed. Boca Raton, CRC Press, 2015; 389-400.