

# **CURRICULUM VITAE OF CECILIA JACOB A HUGO**

**10 August 2016**

## **QUALIFICATIONS**

- 1986: B.Sc. (Physiology and Microbiology) University of the Free State.
- 1987: B.Sc. Hons. (Microbiology) University of the Free State.
- 1991: M.Sc. (Microbiology) University of the Free State
- 1997: Ph.D. (Food Science) University of the Free State

## **CAREER**

- 1987: Appointed in Department of Dairy Science
- Current: Associate Professor, Department of Microbial, Biochemical and Food Biotechnology.

## **RESEARCH STANDING**

- NRF rating: C2
- Associate Editor of International Journal of Systematic and Evolutionary Microbiology

## **MEMBERSHIP**

- Member of the International Committee on Systematics of Prokaryotes - Subcommittee on the taxonomy of *Flavobacterium* and *Cytophaga*-like bacteria
- The South African Society of Microbiology (SASM)
- The South African Society of Dairy Science and Technology (SASDT)
- The South African Association of Food Science and Technology (SAAFoST)
- Registered as Professional Natural Scientist with the South African Council for Natural Scientific Professions (SACNASP)

## **PROMOTOR AND CO-PROMOTOR TO POST-GRADUATE STUDENTS:**

- **Hons:** 30 students
- **M.Sc.:** 12 students
- **Ph.D.:** 8 students

## EXTERNAL EXAMINER/REVIEWER:

- M.Sc./M.Tech.: 9
- Ph.D.: 6
- International Journal of Systematic and Evolutionary Microbiology
- Meat Science
- Antonie van Leeuwenhoek
- Food Research International

## PUBLICATIONS (since 2010)

1. **Charimba, G., Hugo, C.J. & Hugo, A. 2010.** The growth, survival and thermal inactivation of *Escherichia coli* O157:H7 in a traditional South African sausage. Meat Science 85: 89-95. Impact factor = 2.183
2. **De Beer, H. & Hugo, C.J. 2010.** Potential sources of *Chryseobacterium* contamination during poultry processing: a pilot study. Journal for New Generation Sciences 8(3): 20-28.
3. **Mielmann, A., Hugo, C.J. & Jooste, P.J. 2011.** The potential of *Chryseobacterium* species to produce biogenic amines. Journal of Food Safety 31: 75-80. Impact factor = 0.646
4. **Bekker, A., Hugo, C., Albertyn, J., Boucher, C.E. & Bragg, R.R. 2011.** Pathogenic Gram-positive cocci in South African rainbow trout *Oncorhynchus mykiss* L. Journal of Fish Diseases 34:483-487. Impact factor = 1.697
5. **Bernardet, J.-F., Hugo, C.J. & Bruun, B. 2011.** Genus X. *Chryseobacterium* Vandamme, Bernardet, Segers, Kersters and Holmes 1994, 829VP. In: *Bergey's Manual of Systematic Bacteriology*, 2nd edition, Volume 4: The Bacteroidetes, Spirochaetes, Tenericutes (Mollicutes), Acidobacteria, Fibrobacteres, Fusobacteria, Dictyoglomi, Gemmatimonadetes, Lentisphaerae, Verrucomicrobia, Chlamydiae, and Planctomycetes. N.R. Krieg, J.T. Staley, D.R. Brown, B.P. Hedlund, B.J. Paster, N.L. Ward, W. Ludwig & W.B. Whitman (Editors). pp. 180-196. Springer: New York. ISBN 978-0-387-95042-6.
6. **Charimba, G., Hugo, C. & Hugo, A. 2012.** The incidence of diarrhoeagenic *Escherichia coli* in minced beef and boerewors. Food Research International 47: 353-358. Impact factor = 2.414

7. **Hugo, C.J. & Jooste, P.J. 2012.** Culture Media for Food Associated Genera in the Family Flavobacteriaceae. In: *Handbook of Culture Media for Food and Water Microbiology*, 3d edition, J.E.L Corry, G.D.W. Curtis and R.M. Baird (eds.). pp. 508-556. RSC Publishing: Cambridge.
8. **Mathenjwa, S.A., Hugo, C.J., Bothma, C. & Hugo, A. 2012.** Effect of alternative preservatives on the microbial quality, lipid stability and sensory evaluation of boerewors. *Meat Science* 91: 165-172. Impact factor = 2.183.
9. **Van Schalkwyk, C.B.P., Hugo, A., Hugo, C.J. & Bothma, C. 2013.** Evaluation of a natural preservative in a boerewors model system. *Journal of Food Processing and Preservation* 37: 824-834. Impact factor = 0.523.
10. **Charimba, G., Jooste, P., Albertyn, J. and Hugo, C. 2013.** *Chryseobacterium carnipullorum* sp. nov., isolated from raw chicken. *International Journal of Systematic and Evolutionary Microbiology* 63: 3243-3249. Doi: 10.1099/ijls.0.049445-0 Impact factor = 2.268.
11. **Aijuka, M., Charimba, G., Hugo, C.J. and Buys, E.M. 2015.** Characterization of bacterial pathogens in rural and urban irrigation water. *Journal of Water and Health* 13: 103-117. Impact factor = 1.172.
12. **Hugo, C.J. and Hugo, A. 2015.** Current trends in natural preservatives for fresh sausage products. *Trends in Food Science and Technology* 45: 12-23. Impact factor = 4.651.
13. **Vermaas, J.F., Hugo, C.J., Steyn, H.J.H. and Schall, R. 2015.** The efficacy of anolyte as an environmentally friendly disinfectant on *Escherichia coli* and *Staphylococcus aureus* contaminated cotton, polyester/cotton and polyester. *Journal of Family Ecology and Consumer Sciences* 43: 26-32. Impact factor = ?
14. **Mielmann, A., Bothma, C., Hugo, A. and Hugo, C.J. 2015.** Descriptive sensory analysis and consumer acceptability of lucerne (*Medicago sativa* L.). *British Food Journal* 117(12): 2975-2992. Impact factor = 0.973.
15. **Tsôeu, I., Jooste, P.J., Charimba, G. and Hugo C.J. 2016.** Spoilage potential of a novel group of bacteria isolated from dairy products. *South African Journal of Science* 112(1/2): 140-147. Impact factor = 0.957
16. **Bekker, A., Jooste, P., Steyn, L., Bothma, C., Hugo, A. and Hugo, C. 2016.** Lipid breakdown and sensory analysis of milk inoculated with *Chryseobacterium joostei* or *Pseudomonas fluorescens*. *International Dairy Journal* 52: 101-106. Impact factor = 2.433

- 17. Bekker, L. Steyn, G. Charimba, P. Jooste and C. Hugo. 2015.** Comparison of the growth kinetics and proteolytic activities of *Chryseobacterium* species and *Pseudomonas fluorescens*. Canadian Journal of Microbiology 61(12): 977-982. Impact factor = 1.354
- 18. Faihst, T.-J., Myburgh, J., Bothma, C., Hugo, C. and Hugo, A. Accepted.** The effect of conjugated linoleic acid supplementation on the microbial, physical, chemical and sensory properties of yogurt. International Dairy Journal. (In press). Impact factor = 2.433
- 19. Cluff, MacD., Steyn, H., Charimba, G., Bothma, C., Hugo, C.J. and Hugo, A. 2016.** The chemical, microbial, sensory and technological effect of intermediate salt levels as a sodium reduction strategy in fresh pork sausages. Journal of the Science of Food and Agriculture 96: 4048-4055. Impact factor = 1.714
- 20. Bowman, J.P., Bernardet, J.-F. and Hugo, C. 2016.** International Committee on Systematics of Prokaryotes: Subcommittee on the taxonomy of Aerobic Bacteroidetes (formerly *Flavobacterium* and *Cytophaga*-like bacteria). International Journal of Systematic and Evolutionary Microbiology (in press). Impact factor = 2.511
- 21. Falowo, A.B., Muchenje, V., Hugo, C.J. and Charimba, G. 2016.** In vitro antimicrobial activities of *Bidens pilosa* and *Moringa oleifera* leaf extracts and their effects on ground beef quality during cold storage. CyTA – Journal of Food. DOI: 10.1080/19476337.2016.1162847 Impact factor = 0.824.

## CONGRESS CONTRIBUTIONS (since 2010)

- 1. Bekker, A., Hugo, C., Bragg, R. and Albertyn, J. 2010.** Pathogenic Gram-positive cocci in South African rainbow trout. Poster presented at the 15<sup>th</sup> IUFoST Congress. Cape Town International Convention Centre, Cape Town, 22-26 August 2010.
- 2. Charimba, G., Hugo, C. and Hugo, A. 2010.** The incidence of diarrhoeagenic *Escherichia coli* in minced beef and boerewors. Poster presented at the 15<sup>th</sup> IUFoST Congress. Cape Town International Convention Centre, Cape Town, 22-26 August 2010.

3. **Mathenjwa, S.A., Hugo, C. and Hugo, A. 2010.** Microbial quality of boerewors in Bloemfontein, South Africa. Poster presented at the 15<sup>th</sup> IUFoST Congress. Cape Town International Convention Centre, Cape Town, 22-26 August 2010.
4. **Mathenjwa, S.A., Hugo, C.J., Bothma, C. and Hugo, A. 2011.** The effect of natural preservatives on the microbial quality, lipid stability and sensory acceptability of boerewors. Paper presented at the 57<sup>th</sup> International Congress of Meat Science and Technology, August 7-12, Ghent, Belgium.
5. **Bekker, A., Hugo, C., Jooste, P. and Steyn, L. 2011.** Effect of temperature on growth and proteolytic activity of *Chryseobacterium* in milk. Poster presented at the South African Society for Microbiology Conference; Cape Town, South Africa, 6-9 November 2011.
6. **Charimba, G., Hugo, C., Jooste, P. and Albertyn, J. 2011.** The taxonomy of *Chryseobacterium* isolates from poultry sources. Paper presented at the South African Society for Microbiology Conference; Cape Town, South Africa, 6-9 November 2011.
7. **Cluff, M., Hugo, A., Hugo, C. and Bothma, C. 2013.** The effect of conjugated linoleic acid addition on the microbial and lipid stability of salami. Paper presented at the South African Association of Food Science and Technology 20th Biennial International Congress; CSIR International Convention Centre, Pretoria; 7-9 October 2013.
8. **Charimba, G., Jooste, P.J. and Hugo, C.J. 2013.** Degradation of poultry feather waste by *Chryseobacterium carnipullorum*<sup>T</sup>. Paper presented at the South African Association of Food Science and Technology 20th Biennial International Congress; CSIR International Convention Centre, Pretoria; 7-9 October 2013.
9. **Mielmann, A., Hugo, C. and Bothma, C. 2013.** The utilization of lucerne (*Medicago sativa* L.) for human consumption – a microbial and nutrient analysis. Poster presented at the South African Association of Family Ecology and Consumer Science; Pretoria, South Africa, 27 February to 1 March 2013.
10. **Charimba, G., Jooste, P.J. and Hugo, C.J. 2014.** Classification of *Chryseobacterium* strains from raw chicken and chicken feather waste in poultry processing plants. Poster presented at the International Union of Microbiological Societies Congresses. Montreal, Canada, 27 July to 1 August 2014.
11. **Cluff, M., Steyn, J., Bothma, C., Hugo, C.J. and Hugo, A. 2014.** The effect of sodium reduction on the microbial, chemical and sensory quality of a pork sausage.

Poster presented at the 60th International Congress of Meat Science and Technology, Punta del Este, Uruguay, 17-22 August 2014.

- 12. Vermaas, J.F., Hugo, C., Steyn, H. and Schall, R. 2014.** The Efficacy of anolyte as an environmentally friendly disinfectant on *Escherichia coli* and *Staphylococcus aureus* contaminated cotton, polyester/cotton and polyester. Poster presented at the International Federation of Home Economics Pre-council Symposium, Brescia University College, London, Ontario, Canada, 20-24 July 2014.
- 13. Van der Merwe, I., Steyn, H.J.H., Hugo, C. and Schall, R. 2014.** Degumming of *Gonometa postica* cocoons using environmentally conscious methods. Poster presented at the International Federation of Home Economics Pre-council Symposium, Brescia University College, London, Ontario, Canada, 20-24 July 2014.
- 14. Mielmann, A., Bothma, C., Hugo, A., Steyn, F. and Hugo, C.J. 2015.** The acceptability of lucerne (*Medicago sativa* L.) for human consumption. Paper presented at the South African Association of Food Science and Technology 21th Biennial International Congress; Southern Sun Elangeni / Maharani Complex; Durban; 6-10 September 2015.
- 15. Rani, Z.T., Hugo, C.J., Charimba, G. and Muchenje, V. 2015.** Microbial contamination at different stages of the meat distribution chain in Eastern Cape Province, South Africa. Poster presented at the 61<sup>st</sup> International Congress of Meat Science and Technology, Polydome, Clermond, France, 23-28 August 2015.
- 16. Cluff, M., Rasebotsa, D., Roodt, E., Hugo, C.J. and Hugo, A. 2015.** A survey: Labelled versus analyzed salt and sodium content of South African processed meat products. Poster presented at the South African Association of Food Science and Technology 21th Biennial International Congress; Southern Sun Elangeni / Maharani Complex; Durban; 6-10 September 2015.
- 17. Cluff, M., Steyn, H., Kobane, I., Zacharia, P., Bothma, C., Hugo, C. and Hugo, A. 2015.** Sodium reduction: a solution in itself? Paper presented at the South African Association of Food Science and Technology 21th Biennial International Congress; Southern Sun Elangeni / Maharani Complex; Durban; 6-10 September 2015.
- 18. Rani Z. T., Charimba, G., Hugo, C. and Muchenje, V. 2016.** Vacuum packaging and over-wrapping effects during marketing on shelf-life and microbiological quality

of red meat. Paper presented at the 49<sup>th</sup> South African Society of Animal Society Congress; Spier Hotel and Congress Centre, Stellenbosch; 3-6 July 2016.

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