

CURRICULUM VITAE

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ACADEMIC RECORD

High School	Bayswater High School, Victoria, Australia, 1965
Undergraduate	Swinbourne College of Technology, Melbourne, Australia, Diploma of Biochemistry 1969
Graduate	Monash University, Victoria, Australia, M.Sc. Thesis title 'Collagen synthesis in normal and arthritic articular cartilage' 1975 University of Alberta, Edmonton, Canada, Ph.D. Thesis title 'Proteoglycans of the periodontal ligament' 1979

POSTS HELD:

1969-1975 **Research Assistant**, Department of Biochemistry, Monash University, Clayton, Victoria, Australia

1975-1979 **Teaching Assistant**, Department of Oral Biology, University of Alberta, Edmonton, Alberta, Canada

1979-1981 **Research Fellow**, Department of Medical Biochemistry, University of Manchester, Manchester, England

1981-1985 **Research Fellow**, Connective Tissue Research Group, Department of Surgery, University of Auckland, Auckland, New Zealand

1985 -1991 **Senior Research Officer**, Department of Chemical Pathology Adelaide, Children's Hospital, Adelaide, South Australia

1991- **Head, Section of Cell Biology**, Breech Research Laboratory, Bone and Joint Center, Henry Ford Hospital, Detroit, MI, US.

2002 - **Director Bone and Mineral Laboratory**, Henry Ford Hospital, Detroit, MI, USA

2004- 2011 **Director of Research.** Bone and Joint Center, Henry Ford Health Systems, Detroit, MI.

2004- **Professor,** School of Medicine and the Center for Molecular Medicine and Genetics, Wayne State University, Detroit, MI

Research Support

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Serum microRNAs as biomarkers of post- 9/30/2011
traumatic osteoarthritis.

PUBLICATIONS:

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2. Pearson, C.H. & **G.J. Gibson**. Proteoglycans of bovine ligament and dermis. In: 'Glycoconjugates' (D. Schauer, P. Bair, E. Boddicke, M.F. Kramer, J.F.G. Vliegthart & A. Weingandt, eds.), (1979). Publ. Geo. Thieme, Stuttgart.
3. **Gibson G.J.**. Proteoglycans of the bovine periodontal ligament. Ph.D. thesis, University of Alberta (1979).
4. Pearson, C.H. & **G.J. Gibson**. Proteoglycans of bovine periodontal ligament and skin. (1982) *Biochem. J.* **201 (1)**: 27-37.
5. **Gibson G.J.** & C.H. Pearson. Sulphated galactosaminoglycans of bovine periodontal ligament. Evidence for the presence of two major types of hybrids but no chondroitin sulphate . (1982) *Conn. Tis. Res.* **10**: 161-171.

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8. **Gibson G.J.**, S.L. Schor & M.E. Grant. Identification of a new cartilage collagen synthesized by chondrocytes cultured within collagen gels. (1982) Connect. Tissue Res. **9**: 207-208
9. Pearson C.H. & **G.J. Gibson**. Quantitative changes in glycosaminoglycans in developing bovine periodontal ligament. J. Dental Res. (1983) **62** 302.
10. **Gibson G.J.**, C.M. Kielty, C. Garner, S.L. Schor & M.E. Grant. Identification and partial characterization of three low molecular weight collagens synthesized by chondrocytes cultured within collagen gels in the absence and presence of fibronectin. (1984) Biochem. J. **211**: 417-426.
11. **Gibson G.J.**, B.W. Beaumont & M.H. Flint. Synthesis of a low molecular weight collagen by chondrocytes from the presumptive calcification region of the embryonic chick sterna; the influence of culture with collagen gels. (1984) J. Cell Biol. **99**: 208-216.
12. **Gibson G.J.** & M.H. Flint. Type X collagen synthesis by chick sternal cartilage and its relationship to endochondral development. (1985) J. Cell Biol. **101**: 277-284.
13. **Gibson G.J.**, C. Bearman & M.H. Flint. Immunolocalization of type X collagen in chick sterna and growth plate cartilage. (1986) Coll. Rel. Res. **6**:163-184.
14. **Gibson G.J.**, G. Saccone, D. Brooks, P. Clements & J.J. Hopwood. Human N-acetylgalactosamine-4-Sulphate sulphatase: purification, monoclonal antibody production, native and subunit molecular weights. (1987) Biochem. J. **248 (3)**: 755-764.
15. Taylor J.A., **G.J. Gibson**, D.A. Brooks & J.J. Hopwood. Human N-acetylgalactosamine-4-sulphatase biosynthesis and maturation in normal, Maroteaux-Lamy and multiple sulphatase deficient fibroblasts. (1990) Biochem. J. **268**: 379-386.

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20. Brooks DA, G.J. Gibson & J.J. Hopwood. Immunochemical characterization of feline and human N-acetylgalactosamine 4-sulfatase. (1992). Biochem. Med. Metab. Biol. **53**, 58-66.
21. Taylor J.A., **G.J. Gibson**, D.A. Brooks & J.J. Hopwood. α -L-Iduronidase in normal and mucopolysaccharidosis type I human skin fibroblasts. (1991) Biochem. J. **274**, 263-268.
22. Brooks D.A., P.A.G. McCourt, **G.J. Gibson**, L.J. Ashton, M. Shutter & J.J. Hopwood. Analysis of N-acetylgalactosamine-4-sulfatase protein and kinetics in mucopolysaccharidosis type VI patients. (1991) Am. J. Hum. Genet. **48**, 710-719.
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67. Li X, **Gibson G**, Kim J, Kroin J, Xu S, van Wijnen A J, Im, H. (2011) MicroRNA-146a is linked to pain-related pathophysiology of osteoarthritis. *Gene;* 480: 34-41.
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73. Liang Zhang, Maozhou Yang, Theodore Mayer, Brian Johnstone, Clifford Les, Nicholas Frisch, Theodore Parsons, Qing-Sheng Mi & **Gary Gibson**. The use of microRNA biomarkers to distinguish enchondroma from low grade chondrosarcoma. *Connective Tissue Research*. 2016, Jun 7:1-7. [Epub ahead of print].