**Curriculum Vitae**

NAME: Jennifer A. Mather

DEMOGRAPHIC

INFORMATION: Born: Victoria, British Columbia, Canada

 October 13, 1943

 Married, two children

BUSINESS

ADDRESS: Professor, Department of Psychology

 The University of Lethbridge

 Lethbridge, Alberta, T1K 3M4

 Canada

HOME

ADDRESS: 129 Coachwood Point West

 Lethbridge, Alberta T1K 6K8

 Canada

TELEPHONE: (403) 329-2423 (Office)

 (403) 329-2555 (FAX)

E-MAIL: MATHER@ULETH.CA

***EDUCATION***

Ph.D. Brandeis University, 1978 - Psychology

 "Oculomotor Control and Adaptation to Visual Rearrangement"

M.Sc. Florida State University, 1972 - Biology

 "Preliminary Observations on the Behaviour of *Octopus joubini* Robson"

B.Sc. University of British Columbia, 1964 - Biology, Zoology, English

***SCHOLARSHIPS AND AWARDS***

Province of British Columbia Tuition Scholarship - 1960, 1963.

Brandeis University Graduate Scholarship - 1972-78.

Natural Sciences and Engineering Research Council of Canada - University Research Fellow - 1980-85, 1986-1990.

***RESEARCH***

**RESEARCH INTERESTS**:

Behaviour of Cephalopods

Motor defect as markers of brain dysfunction, particularly in schizophrenia

Alzheimer's disease: care issues

Successful university teaching

**PUBLICATIONS:**

Mather, J.A. & Lackner, J.R. (1975). Adaptation to visual rearrangement elicited by tonic vibration reflexes. *Experimental Brain Research* *24,* 103-105.

Mather, J.A. & Lackner, J.R. (1977). Adaptation to visual rearrangement: role of sensory discordance. *Quarterly Journal of Experimental Psychology,* *29*, 237-244.

Mather, J.A. (1978). Mating behaviour of *Octopus joubini* Robson. *The Veliger*, *21*, 265-268.

Mather, J.A. (1980). Feeding and food intake in *Octopus joubini* Robson. *The Veliger,* *22,* 286-290.

Mather, J.A. (1980). Social organization and use of space by *Octopus joubini* in a semi- natural situation. *Bulletin of Marine Science,* *30,* 848-857.

Mather, J.A. & Lackner, J.R. (1980). Adaptation to visual displacement with active and passive limb movements: effects of movement frequency and predictability of movement. *Quarterly Journal of Experimental Psychology,* *32,* 317-323.

Mather, J.A. & Lackner, J.R. (1980). Multiple sensory and motor cues enhance the accuracy of pursuit eye movement. *Aviation Space and Environmental Medicine,*  *51,* 856-859.

Mather, J.A. & Lackner, J.R. (1980). Visual tracking of active and passive movements of the hand. *Quarterly Journal of Experimental Psychology,*  *32,* 307-315.

Lackner, J.R. & Mather, J.A. (1981). Eye-hand tracking using afterimages: evidence that sense of effort is dependent on spatial constancy mechanisms. *Experimental Brain Research,*  *44,* 138-142.

Mather, J.A. & Lackner, J.R. (1981). Adaptation to visual displacement: contribution of proprioceptive, visual and attentional factors. *Perception,* *10,* 367-374.

Mather, J.A. & Lackner, J.R. (1981). The influence of efferent, proprioceptive, and timing factors on the accuracy of eye-hand tracking. *Experimental Brain Research*, *43,* 406-412.

Mather, J.A. (1982). Choice and competition: their effects on occupancy of shell homes by *Octopus joubini. Marine Behaviour and Physiology,*  *8,* 285-293.

Mather, J.A. (1982). Factors affecting the spatial distribution of natural populations of *Octopus joubini* Robson. *Animal Behavior,* *30,* 1166-1170.

Mather, J.A. & Putchat, C. (1983). Parallel ocular and manual tracking responses to a continuously moving visual target. *Journal of Motor Behavior,* *15,* 29-38.

Mather, J.A. & Putchat, C. (1983). Motor control of schizophrenics I. Oculomotor control of schizophrenics: a deficit in sensory processing, not strictly in motor control. *Journal of Psychiatric Research*, *17,* 343-360.

Mather, J.A. & O'Dor, R.K. (1984). Spatial organization of schools of the squid *Illex illecebrosus*. *Marine Behaviour and Physiology,* *10,* 259-271.

Mather, J.A. & Putchat, C. (1984). Motor control of schizophrenics II. Manual control and tracking: sensory and motor deficits. *Journal of Psychiatric Research*, *18,* 287-298.

Mather, J.A. (1984). Development of the behaviour of *Octopus joubini* Robson. *Vie et Mileu,* *34,* 17-20.

Mather, J.A. (1985). Behavioral interactions and activity of *Eledone moschata*: laboratory investigations of a "social" octopus. *Animal Behavior*, *33,* 1138-1144.

Mather, J.A., Resler, S. & Cosgrove, J. (1985). Activity and movement patterns of *Octopus dofleini*. *Marine Behaviour and Physiology,* *11,* 301-314.

Mather, J.A. & Fisk, J.D. (1985). Orienting to targets by looking and pointing: parallels and interactions in ocular and manual performance. *Quarterly Journal of Experimental Psychology,* *37*, 315-338.

Mather, J.A. (1985). Eye movements of teenage children of schizophrenics: a possible inherited marker of susceptibility to the disease. *Journal of Psychiatric Research*, *19*, 523-532.

Mather, J.A. (1985). Some aspects of the motor organization of eye movements. *Journal of Motor Behavior,* *17,* 373-383.

Mather, J.A. (1986). Saccadic eye movements to seen and unseen targets: oculomotor errors in normal subjects resembling those of schizophrenics. *Journal of Psychiatric Research,* *20,* 1-8.

Mather, J.A. (1986). Sand-digging in *Sepia officinalis*: assessment of a cephalopod mollusc's "fixed" behavior pattern. *Journal of Comparative Psychology,* *100,* 315-320.

Mather, J.A. (1986). A female-dominated feeding hierarchy in juvenile *Sepia officinalis* in the laboratory. *Marine Behaviour and Physiology*, *12,* 233-244.

Mather, J.A. (1987). Attention and eye movement problems of schizophrenics: trying to prove a cause for motor disorder. *Canadian Psychology,*  *28,* 380.

Mather, J.A. (1988). Daytime activity of juvenile *Octopus vulgaris* in Bermuda. *Malacologia,* *29,* 69-76.

Mather, J.A. (1988). Perspectives and problems in looking for a genetic marker for schizophrenia. In *A Genetic Perspective for Schizophrenia and Related Disorders.* Smeraldi, E. & Kidd, K.K., Eds. Milan, Edi Edermes, 55-67.

Mather, J.A., Neufeld, R.W.J., Merskey, H. & Russell, N.C. (1989). Release of saccades in schizophrenics: inattention or inefficiency? *European Archives of Psychiatry and Neurological Science,* *239,* 23-26.

Mather, J.A. (1989). Ethical treatment of invertebrates: how do we define an animal? In *Animal Care and Use in Behavioral Research: Issues and Applications.* Washington, Animal Welfare Information Center, National Agricultural Library.

 Mather, J.A., Neufeld, R.W.J., Merskey, H. & Russell, N.C. (1990). Schizophrenic performance on line bisection: no simple lateralization defects. *Journal of Psychiatric Research,**24,* 185-190.

Mather, J.A. & Nixon, M. (1990). *Octopus vulgaris* drills *Chiton*. *Journal of Cephalopod Biology,* *1,* 113-116.

Mather, J.A. (1991). Foraging, feeding and prey remains in middens of juvenile *Octopus vulgaris* (Mollusca: Cephalopoda). *Journal of Zoology, London,* *224,* 27-39.

Mather, J.A. (1991). Navigation by spatial memory and use of visual landmarks in octopuses. *Journal of Comparative Physiology A*,*168,* 491-497.

Mather, J.A. & O'Dor, R.K. (1991). Foraging strategies and predation risk shape the natural history of the juvenile *Octopus vulgaris*. *Bulletin of Marine Science,* *49,* 256-269.

Mather, J.A. (1992). Interactions of juvenile *Octopus vulgaris* with scavenging and territorial fishes. *Marine Behaviour and Physiology,* *19,* 175-182.

Mather, J.A., Neufeld, R.W.J., Merskey, H. & Russell, N.C. (1992). Disruption of saccade production during oculomotor tracking in schizophrenia, and the use of its changes across target velocity as a discrimination of the disorder. *Psychiatry Research,* *43,* 93-109.

Mather, J.A. (1992). Underestimating the octopus. In *The Inevitable Bond: Human-Animal Interactions*. Davis, H. & Balfour, D., Eds. Cambridge, Cambridge U. Press, 240-249.

Mather, J.A. (1993). Octopuses as predators: implications for management. In *Recent Advances in Fisheries Biology*. Okutani, T. O'Dor, R.K. & Kubodera, T., Eds. Tokyo, Tokai University Press, 275-282.

Mather, J.A. & Anderson, R.C. (1993). "Personalities" of octopuses (*Octopus rubescens*). *Journal of Comparative Psychology,* *107,* 336-340.

Mather, J.A. (1994). "Home" choice and modification by juvenile *Octopus vulgaris* (Mollusca: Cephalopoda): specialized intelligence and tool use? *Journal of Zoology, London,* *233,* 359-368.

Mather, J.A. & Mather, D.L. (1994). Skin colors and patterns of juvenile *Octopus vulgaris* in Bermuda. *Vie et Mileu,* *44,* 267-272.

Mather, J.A. (1995). Having a teaching philosophy. *Teaching and Learning Exchange,*  *2,* 7.

Mather, J.A. (1995). An observation on mating of *Octopus vulgaris* in Bermuda. *Journal of Cephalopod Biology,*  *2,* 7-9.

Mather, J.A. (1995) Cognition in cephalopods. In *Advances in the Study of Behavior,* *24,* 316-353.

Mather, J.A. & Nixon, M. (1995) *Octopus vulgaris* (Cephalopoda) drills the chelae of crabs in Bermuda. *Journal of Molluscan Studies,*  *61,* 405-406.

Neufeld, R.W.J., Mather, J.A., Merskey, H. & Russell, N.C. (1995) Multivariate structure of eye movement dysfunction distinguishing schizophrenia. *Multivariate Experimental Clinical Research,* *11,* 1-21.

Mather, J.A. (1996). Why study octopuses? *Lab Animal,*  *25,* 24-25, 28.

Anderson, R.C. & Mather, J.A. (1996). Escape responses of *Euprymna scolopes* Berry 1912 (Cephalopoda: Sepiolidae). *Journal of Molluscan Studies,* *62,*543-545.

Mather, J.A., Mather, D.L. & Wong Chang, M. (1997). Cross-species associations of *Octopus cyanea* Gray, 1849 (Mollusca: Cephalopoda). *The Veliger,*  *40,* 174-177.

Anderson, R.C. & Mather, J.A. (1997). The shells of Gilligan’s Island: common mollusks found around Coconut Island, Oahu. *Of Sea and Shore,*  *20,* 77-82.

Mather, J.A., Oliver, K. & Nemecek, D. (1997). The effect of a walled garden on the behaviour of individuals with Alzheimer’s disease. *American Journal of Alzheimer’s Disease,* *12,* 252-257.

Mather, J.A. (1998) How do octopuses use their arms? *Journal of Comparative Psychology*,

*112,* 306-316.

Mather, J.A. & Anderson, R.C. (1999) Exploration, play and habituation in *Octopus dofleini.* *Journal of Comparative Psychology,* *113,* 333-338.

Anderson, R.C., Hughes, P.C., Mather, J.A. & Steele, C.W. (1999) Determination of the diet of *Octopus rubescens* Berry, 1953 (Cephalopoda: Octopodidae), through examination of its beer bottle dens in Puget Sound. *Malacologia,* *41,* 455-460.

Adamo, S.A., Brown, W.M., King, A.J., Mather, D.L., Mather, J.A. Shoemaker, K.L. & Wood, J.B. (2000) Agonistic and reproductive behaviours of the cuttlefish *Sepia officinalis* in a semi-natural enviornment. *Journal of Molluscan Studies,* *66,* 417-419.

Mather, J.A. (2001) Animal suffering: an invertebrate perspective. *Journal of Applied Animal Welfare Science,*  *4,* 151-156.

Sinn, D., Perrin, N., Mather, J.A. & Anderson, R.C. (2001) Early temperamental traits in an octopus. *Journal of Comparative Psychology,* *115,* 351-364.

Mather, J.A. (2002) A Different balance. In Women in the Canadian Academic Tundra: Trails, trials and triumphs. S. Vethamany Globus, L. Paul and E. Rosen Hanna, eds. Kingston, ON, Queens/McGill Press, pp. 147-150.

Byrne, R.A., Griebel, U., Wood, J.B. and Mather, J.A. (2003) Squid say it with skin: a graphical model of skin display systems in the Carribean reef squid. In Warnke, K., Keupp, H. and Boletzky, S.V. (Eds) Coleoid Cephalopods through time. *Berlin Paläeobiological Abhandlungen,* *3*, 29-35.

Kuba, M., Meisel, D.V., Byrne, R.A., Griebel, U. and Mather, J.A. (2003) Looking at play in *Octopus vulgaris* In: Warnke, K., Keupp, H., Boletsky, S.V. (Eds) Coleoid cephalopods through time. *Berlin Paläeobiological Abhandlungen,*  *3*, 163-169.

Meisel, D.V., Byrne, R.A., Kuba, M., Greibel, U. And Mather, J.A. (2003) Circadian rhythms in *Octopus* *vulgaris*. Symposium: in Warnke, K., Kaupp, H. And Boletzky, S.V. (Eds) Coleoid Cephalopods through time. *Berlin Paläeobiological Abhandlungen,* *3*, 29-35.

Mather, J.A. & Mather, D.L. (2004) Apparent movement in a visual display: the Passing Cloud in *Octopus cyanea*. *Journal of Zoology*, *London*, *263,* 89-94.

Anderson, R.C., J.A. Mather and C.W. Steele. (2004) Burying and associated behaviors of

*Rossia pacifica* (Cephalopoda: Sepiolidae). *Vie et Milieu,* *54,* 13-19.

Mather, J.A. (2004) Cephalopod skin displays: from concealment to communication. In Oller, K. and Greibel, U., eds. Evolution of Communication Systems, Cambridge, MA: MIT Press, pp. 193-213.

Byrne, R.A., Kuba, M.J., Meisel, D.V., Griebel, U. and Mather, J.A. (2006) Does *Octopus vulgaris* have preferred arms? *Journal of Comparative Psychology,* *120,* 198-204.

Kuba, M.J., Byrne, R.A., Meisel, D.V. and Mather, J.A. (2006) Exploration and habituation in *Octopus vulgaris*. *International Journal of Comparative Psychology,* *19,* 426-438 .

Meisel, D.A., Byrne, R.A., Kuba, M.J. and Mather, J.A. (2006) Comparing the activity patterns of two Mediterranean octopus species. *Journal of Comparative Psychology,* *120,* 191-197.

Mather, J.A. (2006). Behaviour development: A cephalopod perspective. *International Journal of Comparative Psychology,* *19,* 98-115.

Byrne, R.A., Kuba, M.J., Meisel, D.V., Greibel, U. and Mather, J.A. (2006) Octopus arm use is strongly influenced by eye use. *Behavioral Brain Research,* *172,* 195-201.

Kuba, M., Byrne, R.A., Meisel, D.V. and Mather, J.A. (2006) When do octopuses play? The effect of repeated testing, age and food deprivation an object play in *Octopus vulgaris*. *Journal of Comparative Psychology,* *120,* 184-190.

* Kuba, M., Byrne, R.A., Meisel, D.V. and Mather, J.A. (2006) Exploration and habituation in intact free moving *Octopus vulgaris. International Journal of Comparative Psychology, 19,* 246-426.

Mather, J.A. and Anderson, R.C. (2007) Ethics and invertebrates: a cephalopod perspective. Special issue of *Diseases of Aquatic Organisms,* *75,* 119-129.

Hindes, Y. and Mather, J.A. (2007) Inclusive education at the post-secondary level: Attitudes of students and professors. *Exceptionality Education Canada,* *17,* 107-128.

Anderson, R.C. and Mather, J.A. (2007) The packaging problem: Bivalve mollusc prey selection and prey entry techniques of *Enteroctopus dofleini*. *Journal of Comparative Psychology,* *121,* 300-305.

Mather, J.A. (2008) Cephalopod consciousness: Behavioural evidence*. Consciousness and Cognition*, *17,* 37-48,

Mather, J.A. (2008) To boldly go where no mollusc has gone before: Personality, play, thinking and consciousness in Cephalopods. *American Malacological Bulletin,*  *24,* 51-58.

Leite, T.S. and Mather, J.A. (2008) A new approach to octopuses' body pattern analysis: a framework for taxonomy and behavioral studies. *American Malacological Bulletin,*  *24,* 31-42.

Mather, J.A. and Champagne, A. (2008) Student learning styles/strategies and professors' expectations: Do they match? *College Quarterly, 11*, 1-8.

* Anderson, R.C., Mather, J.A. and Sinn, D.L. (2008). Octopus senescence; forgetting how to eat clams. *Festivus XL*, 55-56.

Anderson, R.C., Sinn, D. and Mather, J.A. (2008). Drilling localization on bivalve prey by *Octopus rubescens* Berry, 1953 (*Cephalopoda, Octopodidae*). *The Veliger,* *50*, 326-328.

Anderson, R.C., Wood, J.B. and Mather, J.A. (2008). *Octopus vulgaris* in the Caribbean is a specializing generalist. *Marine Ecology Progress Series, 371*, 199-202.

Mather, J.A. (2008). Teaching a non-course. *Transformative Dialogues* (Electronic Journal, Kwantlen University College).

Kovács, Á. and Mather, J.A. (2008). Cephalopod cognition and scholastic psychology. *Res Cogitans, 5*, 23-38.

DeJong, M.A and Mather, J.A. (2009) Undergraduates perception of schizophrenia. *International Journal of Mental Health, 7*, 458-467.

* Leite, T.S., Harmovici, M., Mather, J. and Lino Oliviera, J.F. (2009) Habitat, distribution and abundance of the commercial octopus (*Octopus insularis*) in a tropical oceanic island, Brazil: information for management of an artisanal fishery inside a marine protected area. *Fisheries Research Journal, 98*, 85-91.

Mather, J.A. (2009) What do professors want to learn to improve their teaching? Alan Wright, Margaret Wilson and Dawn MacIsaac, eds, *Collected Essays on Learning and Teaching*, V. II, 8-11

* Leite, T.S., Haimovici, M. and Mather, J. (2009) *Octopus insularis* (Octopodidae), evidences of a specialized predator and a time-minimizing forager. *Marine Biology*, http://www.springerlink.com/content/b64v20562nr23336/
* Mather, J.A., Anderson, R.C. and Wood, J.B. (2010) *Octopus*: *The ocean’s intelligent invertebrate*. Timber Press, book in press.

Mather, J.A. and Logue, D.M. “The bold and the spineless: approaches to personality in invertebrates” C. Carere and D. Maestripipieri, eds, Animal Personalities: *Behavior, Physiology and Evolution*. University of Chicago Press, in press.

Anderson, R.C., Mather, J.A., Monette, M.Q. and Zimsen, S.R.M. (2010) Octopuses (*Enteroctopus dofleini*) recognize individual humans. JAAWS, 13, 261-272.

Mather, J.A., Byrne, R.A. and Greibel, U. (2010) Squid dances: movement and postures of *Sepioteuthis sepiodea* with a muscular hydrostat system. *Marine and Freshwater Behaviour and Physiology*, 43, 45-61.

Anderson, R.C. and Mather, J.A. (2010) It’s all in the cues: Octopuses (*Enteroctopus dofleini*) learn to open jars. *Ferrantia* 59, 8-13.

Byrne, R.A., Wood, J.B., Anderson, R.C., Greibel, U. and Mather, J.A. (2010) Non-invasive methods of identifying and tracking wild squid. *Ferrantia*, 59, 22-31.

Mather, J. A. Vigilance and antopredator responses of Caribbean reef squid. In press, *Marine and* *Freshwater Behaviour and Physiology.*

Mather, J.A. Ethical background of attitudes to invertebrates. In submission, invited for special issue of ILAR journal.

Mather, J.A. Foraging and the development of intelligence in octopuses. Manuscript in preparation.

**PAPERS PRESENTED:**

Feeding and Food Intake in *Octopus joubini*.

Presented at the Western Society of Naturalists Annual Meeting, Vancouver, December, 1975.

Social Behaviour of *Octopus joubini* in a Semi-Natural Situation.

Presented at the North-East Regional Meeting of the Animal Behaviour Society, New York City, October, 1976.

Head Orientation and Stationary Food Stimuli by *Iguana iguana*.

Presented at the NATO Conference, "New Approaches in Analysis of Visual Behavior", Waltham, June 1978.

Oculomotor Control and Eye-Hand Tracking.

Presented at the Eastern Psychological Association Annual Meeting, Philadelphia, March, 1979.

Multiple Cues for Oculomotor Tracking.

Presented at the American Psychological Association Annual Meeting, New York, September, 1979.

Factors Affecting Spacing of *Octopus joubini*.

Presented at the American Malacological Union Annual Meeting, Louisville, July, 1980.

Head Orientation in *Iguana iguana*.

Presented at the Regional Meeting, Animal Behaviour Society, Rochester, November, 1980.

Causes of the Deficiencies in Oculomotor Pursuit Tracking of Schizophrenics.

Presented at the Canadian Psychological Association Annual Meeting, Toronto, June, 1981.

Movement and Activity of *Octopus dofleini*.

Presented at the Regional Meeting, Animal Behaviour Society, Kingston, November, 1981.

Parallel Ocular and Manual Tracking of a Visual Target.

Presented at the Psychonomic Society, Philadelphia, November, 1981.

Programming of Saccadic Eye Movements to Seen and Unseen Targets.

Presented at the Regional Neurosciences Meeting, Lake Ontario Area, Syracuse, June, 1982.

Interaction of Hand and Eyes in Orienting. (with J.D. Fisk)

Presented at the Psychonomic Society, Minneapolis, November, 1982.

Movement and Activity of *Octopus dofleini* Monitored by Sonic Tracking.

Presented at the National Shellfisheries Association, Special Symposium on Octopods, Hilton Head, June, 1983.

The Balance of Saccades and Pursuit in Oculomotor Tracking.

Presented at the Southern Ontario Neurosciences Annual Meeting, Hamilton, June, 1983.

Eye Movements of Teenage Children of Schizophrenics: a Possible Inherited Marker of Susceptibility to the Disease.

Presented at European Brain and Behaviour Society Meeting, Marseilles, September, 1983.

Ocular and Manual Movements to Visual and Auditory Targets. (with J.D. Fisk)

Presented at Neurosciences, Boston, November, 1983.

Oculomotor Control of Looking: Commonality and Differences in Orienting Systems.

Presented at the Canadian Psychological Association Annual Meeting, Ottawa, June, 1984.

Parallels in Ocular and Manual Programming: Underlying Control Principles?

Presented at the Canadian Society for Psychomotor Learning and Sports Psychology Annual Conference, Special Symposium "Theoretical Issues in Motor Programming", Kingston, October, 1984.

The Role of Sensory Processing In Movement Control.

Presented at the Canadian Psychological Association Annual Meeting, Halifax, June, 1985.

Multiple Influences on Spatial Information Processing.

Presented at the Psychonomic Society, Boston, November, 1985.

Tactile Line Bisection - Can We Link Normals to "Neglect"?

Presented at the Canadian Psychological Association Annual Meeting, Toronto, June, 1986.

Movement, Spacing and Activity of Juvenile *Octopus vulgaris*.

Invited presentation at a Special Symposium on Cephalopods, American Malacological Union Annual Meeting, Monterey, July, 1986.

Saccadic Oculomotor Dysfunctions in Schizophrenics: Spatial Information Processing, Not Motor Control. Presented at a Satellite Meeting of the 30th International Congress of Physiological Sciences, Gleneden Beach, July, 1986.

Attention and Eye Movement Problems of Schizophrenics: Trying to Prove a Cause for a Motor Disorder.

Presented at the Canadian Psychological Association Annual Meeting, Vancouver, June, 1987.

Sand-digging in *Sepia officinalis*: Assessment of a Fixed Behaviour Pattern in a Cephalopod Mollusc.

Presented at the XX International Ethological Congress, Madison, July, 1987.

Perspectives and Problems in Looking for a Genetic Marker for Schizophrenia.

Invited presentation to a Workshop "A Genetic Perspective for Schizophrenic and Related Disorders", Milan, October, 1987.

The Effect of Naming on Spatial Memory.

Presented at the Psychonomic Society, Seattle, November, 1987.

Spatial Memory of Octopuses: Evidence from the Field.

Presented at COAL (Canadian Psychological Association pre-conference programme), Montreal, June, 1988.

Evaluating Behaviour Changes Over Time.

Presented in a Symposium "Methods of Analysis of Movement and Behaviour", the Canadian Psychological Association Annual Meeting, Montreal, June, 1988.

Release of Saccades in Schizophrenics: Inattention or Inefficiency?

Invited presentation at a Workshop "Eye Movements and Psychopathology", West Berlin, June, 1988.

Ethical Treatment of Invertebrates: How do We Define an Animal?

Invited paper, session on "Animal Care/Use: Regulations, Practices and Improvements". Animal Behaviour Society Annual Meeting, Missoula, August, 1988.

Foraging Strategies of Juvenile *Octopus vulgaris*.

Presented at the Animal Behavior Society Annual Meeting, Missoula, August, 1988.

Verbal Strategies and Spatial Memory in the Aged and Alcoholics.

Presented at a Symposium on "Spatial Performance", the Canadian Psychological Association Annual Meeting, Halifax, June, 1989.

Central Control of the Dual Speed Oculomotor System, and the Problems of Schizophrenic Subjects.

Presented at a Symposium on "Movement Control", the Canadian Psychological Association Annual Meeting, Halifax, June, 1989, also symposium organizer.

Problems of Family Caregivers of Persons with Alzheimer's Disease. (with R. Arms)

Poster presentation at the Canadian Psychological Association Annual Meeting, Halifax, June, 1989.

I'm a Lonely Little Octopus in a Sea of Fish: Interactions of Fish with Juvenile *Octopus vulgaris*.

Presented at the Animal Behaviour Society Annual Meeting, Northern Kentucky University, June, 1989.

Assessment of Prey Remains in Middens as Evidence of Foraging in Juvenile *Octopus vulgaris*.

Presented at the XXI International Ethological Congress, Utrecht, August, 1989.

Foraging, Movement Patterns and Energetics of Juvenile *Octopus vulgaris*.

Invited presentation (with R.K. O'Dor) at a Special Symposium "Cephalopod Natural History", American Malacological Union Annual Meeting, Woods Hole, June, 1990.

Visual Memory and Navigation in Juvenile *Octopus vulgaris*.

Invited presentation at a Special Symposium "The Behavior of Molluscs", American Malacological Union Annual Meeting, Woods Hole, June, 1990.

Saccade Number in Oculomotor Tracking Across Target Velocities; a More Effective Discriminator of Eye Movement Disorder in Schizophrenia. (with R.W.J. Neufeld, H. Merskey, and N.C. Russell)

Presented at Schizophrenia 1990, Vancouver, July, 1990.

Home Choice and Modification by Juvenile *Octopus vulgaris*.

Presented at the Animal Behaviour Society Annual Meeting, Wilmington, June, 1991.

"Personalities" of Octopuses.

Presented at Canadian Society for Brain, Behavioural and Cognitive Science Annual Meeting, Calgary, June 1991.

Saccades and Pursuit in the Eye Movement Dysfunction of Schizophrenics.

Presented at Canadian Society for Brain, Behavioural and Cognitive Science Annual Meeting, Calgary, June 1991.

Octopuses as Predators.

Presented at a CIAC Conference on Fisheries Biology of Cephalopods, Shimizu City, July, 1991.

Octopus Personalities.

Presented at the XXII International Ethological Congress, Kyoto, August, 1991.

Individual Variation in Behaviour: Factor Analysis in Different Species.

Presented at the Animal Behaviour Society Annual Meeting, Kingston, June, 1992.

Visuospatial Memory Impairment in Schizophrenia: Interactions in a Dual Naming and Replacement Task. (with W. Gaebel and W. Wöelwer)

Poster presentation at Schizophrenia 1992, Vancouver, July, 1992.

Schizophrenic Spatial Memory Deficit in a Replacement Task: I. Eye Movement during the Encoding Period. (with W. Gaebel and W. Woelwer)

Presented at International Congress on Schizophrenia Research, Colorado, June, 1993.

Schizophrenic Spatial Memory Deficit in a Replacement Task: II. Hand Movement Behaviour During the Replacement Period. (with W. Gaebel and W. Woelwer)

Presented at International Congress on Schizophrenia Research, Colorado, June, 1993.

Learning by discussion.

Presented at The Society for Teaching and Learning in Higher Education Annual Conference, Winnipeg, June, 1993.

Egalitarian Ethologists: Question Answering at the 29th ABS Conference.

Presented at the Animal Behaviour Society Annual Meeting, Davis, July, 1993.

Octopus "Personalities".

Presented at a CIAC Conference and Workshop on Cephalopod Natural History and Behaviour, Vico Equense, June, 1994.

Invited Workshop Organizer: Workshop on Cephalopod Cognition at a CIAC Conference and Workshop on Cephalopod Natural History and Behaviour, Vico Equense, June, 1994.

Den Associates of *Octopus cyanea*. (with D.L. Mather and M. Wong Chang)

Poster presentation at a CIAC Conference and Workshop on Cephalopod Natural History and Behaviour, Vico Equense, June, 1994.

Octopuses and Clams: The Packaging Problem. II. Entry Techniques (with R. Anderson).

Presented at a CIAC Conference and Workshop on Cephalopod Natural History and Behaviour, Vico Equense, June, 1994.

Octopuses and Clams: The Packaging Problem. I. Clam Choice (with R. Anderson).

Presented at the Animal Behaviour Society Annual Meeting, Seattle, July, 1993.

Octopuses and Clams: The Packaging Problem. I. Clam Choice (with R. Anderson).

Presented at the Puget Sound Research Conference, Seattle, January, 1995.

Does Having Access to a Walled Garden Make a Difference to Nursing Home Residents with Alzheimer's? (with K. Oliver)

Presented at the Alzheimer Society of Canada Annual Conference, Edmonton, April, 1995.

Invited Participant. Workshop on "Evolution of Cognition".

Krasnow Institute for Advanced Study, George Mason University, Fairfax, VA, June, 1995.

Inter- and Intraspecies Differences in Shell Drilling by Octopuses. (with R. Anderson)

Presented at a Special Symposium "The Evolution of Coleoid Cephalopods", American Malacological Union Annual Meeting, Hilo, June, 1995.

Individual Differences in Behaviour of Octopuses: activity and feeding.

Presented at a Special Symposium "The Evolution of Coleoid Cephalopods", American Malacological Union Annual Meeting, Hilo, June, 1995.

Effects of a Diminished Food Supply on Foraging by *Octopus cyanea*.

Presented at the XXIV International Ethological Congress, Honolulu, August, 1995.

Cephalopod Cognition.

Presented at the Conference on Comparative Cognition, Melbourne, March, 1996.

Octopus skin displays: the Passing Cloud.

Presented at Animal Behaviour Society Annual Meeting, Flagstaff, August, 1996.

Defining Teaching: when do students learn best?

Presented at Society for Teaching and Learning in Higher Education Annual Conference, Ottawa, June, 1996.

All gone but the Cheshire Cat smile: three ways women scientists “fade into the woodwork”

Presented at Conference for Women in Science and Technology, Saskatoon, September, 1996.

Organizer: Conference theme (4 presentations) on Inclusive Teaching

Presenter: Presenting Your Teaching

CAUT Status of Women Conference, Halifax, October 1996.

Inclusive teaching: Teaching as if every single student mattered (with L. Paul)

Presented at Society for Teaching and Learning in Higher Education Annual Conference, Regina, June, 1997

Active learning -- Learning by doing

Presented at Society for Teaching and Learning in Higher Education Annual Conference, Regina, June, 1997

The CAUT Status of Women Committee: mentoring, networking and working for the future. Presented at Women in the (Science) Workplace, Vancouver, May 1998.

Teaching across cultures: lesson from a semester exchange teaching in Japan (with D. L. Mather). Presented at Society for Teaching and Learning in Higher Education, Sackville, N.S., June, 1998.

Do Octopuses Play? Presented at Animal Behaviour Society, Carbondale, July, 1998.

R.C. Anderson, P.D. Hughes, J.A. Mather and C.W. Steele, Beer bottles on the sea floor: trash, dens and research opportunities, World Congress of Malacology, Washington, D.C., July 1998. (presented by R. Anderson).

Conference organizer: CAUT Status of Women conference, Regina, October, 1998.

Presentation “What hinders women in science” in session on The Role of NSERC in helping Women in Science, CAUT Status of Women Conference, Regina, October 1998.

What students expect from university professors (with M. Miles and A. Sharma). Presented at Society for Teaching and Learning in Higher Education, Calgary, June 1999.

Students’ perceptions of university teachers’ attitudes (with D. Smit-Provost). Presented at Society for Teaching and Learning in Higher Eudcation, Calgary, June 1999.

What do squid signal with a Zebra display? I. The Formal Challenge. Presented at American Malacological Society Annual Meeting, Pittsburg, July 1999.

Mating games squid play. Presented at Animal Behaviour Society Annual Meeting, Lewisburg, July 1999.

Anderson, R.C., Mather, J.A. & Steele, C.W. The burying behaviors of *Euprymna scolopes*, Berry, 1913. Presented at the annual conference of the American Malacological Society (by R. Anderson), San Francisco, July 2000.

Mather, J.A. & Mather, D.L. Mating strategies of *Sepioteuthis sepioidea*. Presented at the CIAC cephalopod conference, Aberdeen, July 2000.

Mather, Do squid make a visual language on their skin: the case of the Zebra display. Presented at a joint BBCS/BPS meeting, Cambridge, July 2000.

Mather, J.A. I’m a lonely little squidlet in a sea of fish. Presented at the annual conference of the Animal Behavior Society, Atlanta, August 2000.

Mather, J.A. Do squid make a visual language on their skin? the case of the Zebra. Presented at Conference on Comparative Cognition, Melbourne, March 2001.

Mather, J.A. What do female *Sepioteuthis* squid say with a Saddle? Presented at the annual conference of the Animal Behaviour Society, Corvallis, July 2001.

Mather, J.A. Do squid lie with Zebra? Comparison of male-male displays in agonistic situations. Presented at the World Malacological Congress, Vienna, August 2001. (Presented by S. Boom).

Co-organizer, Symposium: “Cephalopods in their World”, XXVII International Ethological Conference, Tubingen, August 2001. (Presented by R. Anderson).

Mather, J.A. Do squid make a visual language on their skin? the case of the Zebra display. Presented at XXVII International Ethological Conference, Tubingen, August 2001.

Boom, S., Byrne, R.A. and Mather, J.A. Schooling behavior of the Caribbean reef squid, *Sepioteuthis sepioidea*, in Bonaire. Presented at XXVII International Ethological Conference, Tubingen, August 2001.

Anderson, R.A., Mather, J.A. and Steele, C.W. Burying and possible angling by the sepiolid squid *Rossia pacifica*. Presented at XXVII International Ethological Conference, Tubingen, August 2001.

Mather, J.A. Cephalopod skin displays: from concealment to communication. Presented to an invited workshop “Evolution of Communication Systems: A Comparative Approach”, Konrad Lorenz Institut for Evolution and Cognition, Vienna, October 2001.

Mather, J.A. How do students learn and how do we expect them to learn? Presented at Society for Teaching and Learning in Higher Education, Hamilton, ON, June 2002.

Mather, J.A. Going dotty: are squid directing dymantic startle displays to potential trouble? Presented at Animal Behaviour Society, Bloomington, July 2002.

Griebel, U., Byrne, R. and Mather, J.A. Squid skin flicks - *Sepioteuthis sepioidea* display repertoire. Presented at Animal Behavior Society, Bloomington, IN, July 2002. (Presented by U. Greibel).

Anderson, R.C. And Mather, J.A. Sleep behavior in octopuses, *Enteroctopus dofleini* (Cephalopoda: Octopodidae). Presented at the annual meeting of the American Malacological Society, Charleston, August 2002. (Presented by R. Anderson).

Byrne, R.A., Griebel, U., Wood, J.B. And Mather, J.A. Squid say it with skin: a graphical model of skin display systems in the Carribean reef squid. Symposium: Cephalopods Past and Present, Berlin, October 2002. (Presented by R.A. Byrne).

Kuba, M., Meisel, D.V., Byrne, R.A., Greibel, U. And Mather, J.A. The basics of play. Symposium: Cephalopods Past and Present, Berlin, October 2002. (Presented by M. Kuba).

Meisel, D.V., Byrne, R.A., Kuba, M., Greibel, U. And Mather, J.A. Circadian rhythms in *Octopus* *vulgaris*. Symposium: Cephalopods Past and Present, Berlin, October 2002. (Presented by D.V. Meisel).

Mather, J.A. Do squid make a visual language on their skin? Presented at the International Cephalopod Symposium and Workshop, Phuket, February 2003.

Greibel, U. and Mather, J.A. Double signalling in *Sepioteuthis sepioidea*. Presented at the International Cephalopod Symposium and Workshop, Phuket, February 2003. (Presented by U. Greibel).

Mather, J.A. Going dotty II: do squid address Dymantic startle responses to potential predators or conspecifics? Presented at the Annual meeting of the Animal Behavior Society, Boise, July 2003.

Mather, J.A. and Zawistowski, S. Symposium: Animal Behavior Career Choices. Presented at the annual meeting of the Animal Behavior Society, Boise, July 2003.

Mather, J.A. Career development. Presented in the Symposium on Animal Behavior Career Choices, annual meeting of the Animal Behavior Society, Boise, July 2003.

Mather, J.A. Do squid make a visual langauge on their skin? Presented at the annual meeting of the Psychonomics Society, Vancouver, November 2003.

Greibel, U., Mather, J.A. And Oller, D.K. Double signalling in the Caribbean reef squid *Sepioteuthis sepioidea*. Presented at the meeting of the Association of Southeastern Biologists, Memphis, April 2004. (Presented by U. Greibel).

Mather, J.A. Directionality in the skin display system of squid *Sepioteuthis sepioidea*. Special symposium: The behaviour and neurophysiology of molluscs, The Malacological Society of London. London, April 2004.

Byrne, R.A., Kuba, M.J., Meisel, D., Griebel, U. and Mather J.A. Do octopuses have preferred arms? Presented at the annual meeting of the Animal Behavior Society, Oaxaca, Mexico, June 2004. (Presented by R.A. Byrne).

Mather, J.A. Squid of a different stripe: the male sexual display in *Sepioteuthis sepioidea*. Presented at the annual meeting of the Animal Behavior Soicety, Oaxaca, June 2004.

Anderson, R.C., Wood, J.B. And Mather, J.A. Diet and prey handling of *Octopus vulgaris* in the Caribbean. American Malacological Society annual meeting, Sanibel, August 2004. (Presented by R.C. Anderson).

Mather, J.A. Deprived childhoods: a developmental approach to cephalopod learning and cognition. Presented at Symposium: Current Research in Comparative Psychology. 12th meeting of International Society for Comparative Psychology, Oviedo, September 2004.

Mather, J.A. You want me to do what? Barriers to inquiry learning for university teachers. Presented at Symposium on Inquiry Learning, Hamilton, October 2004.

Mather, J.A. Inclusion of students with disabilities: How do students and faculty feel? Presented at Society for Teaching and Learning in Higher Education, Charlottetown, May 2005.

Mather, J.A. Shades of Zebra: answering questions about visual display variability from field observation of squid displays. International Ethological Conference, Budapest, August 2005.

Co-organizer, Workshop, Methods in studying cephalopod behaviour. International Ethological Conference, Budapest, August 2005.

Anderson, R.C. and Mather, J.A. Bivalve prey selection and prey entry techniques of *Enteroctopus dofleini*: it's not just a bunch of shells. International Ethological Conference, Budapest, August 2005. (Presented by R. Anderson).

Byrne, R.A., Wood, J.A., Anderson R.C. and Mather, J.A. Non-invasive squid identification: searching for star signs on squid skin. IEC, Budapest, August 2005. (Presented by R. Byrne)

Anderson, R.C. and Mather, J.A. Ethics and invertebrates: where do we draw the line? Regional Aquatic Workshop, May 2006. (Presented by R.C. Anderson).

Leite, T.S. and Mather, J.A. Not just a chameleon: octopuses have a body pattern repertoire. American Malacological Society, Seattle, July 2006 (Presented by T. Leite).

Organizer: Symposium "Cephalopods: A behavioral perspective". American Malacological Society, Seattle, July 2006.

Mather, J.A. To boldly go where no mollusc has gone before: personalities, play and consciousness in cephalopods. American Malacological Society keynote talk, Seattle, July 2006.

Mather, J.A. and Anderson, R.C. It's all in the cues: octopuses can learn to open jars. Animal Behaviour Society, Snowbird, August 2006.

Anderson, R., Sinn, D. and Mather, J. Red octopus drills clams. Georgia Basin/Puget Sound Research Conference, Vancouver, March 2007. (Presented by R. Anderson).

Anderson, R. and Mather, J. Octopuses (*Enteroctopus dofleini*) need cues for learning. Georgia Basin/Puget Sound Research Conference, Vancouver, March 2007. (Presented by R. Anderson).

Mather, J.A. Taking Inquiry to the everyday classroom. Society for Teaching and Learning in Higher Education. Edmonton, June 2007.

Mather, J.A,, Byrne, R. and Sinn, D. Anatomy of a display: the female squid's Saddle - Animal Behaviour Society. Burlington, July 2007.

Mather, J.A. and Anderson, R.C. Do octopuses pass the mirror test? International Ethological Conference. Halifax, August 2007.

Mather, J.A. What do university teachers want to learn to improve their teaching? Society for Teaching and Learning in Higher Education. Windsor, June 2008.

Mather, J.A. and Johnson, D. Changing student attitudes to invertebrates. Animal Behavior Society, Snowbird, August, 2008.

Mather, J.A., Greibel, U. and Byrne, R.A. Squid dances: movement and postures of *Sepioteuthis sepioidea* with a muscular hydrostat system. Coleoid Cephalopods through Time. Luxembourg, October 2008.

Anderson, R.C. and Mather, J.A. Octopuses (*Enteroctopus dofleini*) learn to open jars with cross-model cueing. Coleiod Cephalopods through Time. Luxembourg, October, 2008. (Presented by R. Anderson).

Byrne, R.A., Wood, J.B., Anderson, R.C. and Mather, J.A. Non-invasive squid identification for behavioural observation in the field. Poster (converted to talk). Coleoid Cephalopods through Time, Luxembourg, October 2008.

Mather, J.A. Non-terrestrial intelligence. TED 2009, Long Beach, CA, February 2009.

Mather, J.A., Anderson, R.C. and Leite, T.S. The octopus eyebar: anatomy of a skin display. Animal Behavior Society, Pirenopolis, June 2009.

Leite, T.S. and  Mather, J.A.  Octopus camouflage: a defensive strategy during foraging? Animal Behavior Society, Pirenopolis, June 2009. (Presented by T. Leite).

Young, D.R. and Mather, J.A. Learning development – a deep dark secret. World Association for Co-operative Education, Vancouver, June 2009. (Presented by D.R. Young).

Mather, J.A. and Petersen, K.A. Fostering student involvement by inquiry learning in groups. Teaching of Psychology, Vancouver, July 2009.

Petersen, K.A. and Mather, J.A. Student interactions in group based inquiry learning. Teaching in Psychology, Vancouver, July 2009. (Presented by K. Petersen).

Mather, J.A., Anderson, R.C. and Wood, J.B. What does prey choice of octopuses tell us about their intelligence? Symposium talk, International Ethological Conference, Rennes, August 2009.

Anderson, R.C. and Mather, J.A. What we have learned from octopus middens. Pacific Northwest Shell Club, October 2009. (Presented by R.C. Anderson).

 **MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS:**

 Animal Behaviour Society, 1972-

 Member, Animal Care Committee, 1986-90

 Organization and Bylaws Committee, 1993-1996

 Education Committee 2003-

 Canadian Psychological Association, 1980-1990

 Canadian College of Neuropharmacology, 1988-1992

 Psychonomic Society, 1982-

 **OTHER RESEARCH EXPERIENCE:**

Principal Investigator: Earthwatch Field Expedition "The Elusive Octopus". October, 1979.

Principal Investigator: Earthwatch Field Expedition "The Shy Octopus". August-September, 1984; July-August, 1985.

Principal Investigator: Field Expedition "Influences on Foraging by *Octopus cyanea*". National Geographic Society. August 1993; August, 1994; July-August, 1995.

**Teaching Research:**

“Phase I of Arts & Science 3001, the Capstone Course.” (funded) 1993.

“What is Teaching in the University Context?” (funded) 1994.

“What Matters in Teaching: When do Students Learn?” (funded) 1997

“Students’ Evaluation of University Teachers’ Attitudes”, with H. Katsura, Faculty of General Studies, Hokkai-Gakuen University (funded) 1998.

“Student learning styles”, Angela Champagne, 2001.

“Gender and University Teaching” with; M. Hawkins and N. Acharya (funded) 2003.

“Learning Objectives and the Facilitators of Learning for Co-operative Students” with D. Young (funded) 2007.

“Assessments of the Benefits of a Liberal Education by University of Lethbridge Alumni” with B. MacKay (funded) 2007, 2008.

“Needs Assessment of Faculty (unfunded) 2007-08.

Student interactions in Group-based Inquiry Learning (Kim Petersen, Independent Study), 2009.

***TEACHING***

**PHILOSOPHY AND GOALS**

In accordance with the Statement of Philosophy of the University of Lethbridge, to "foster the spirit of free inquiry and the critical interpretation of ideas in students."

To equip students with specific skills that will allow them to master the information environment in which they will work.

To emphasize not my teaching but students' learning, so they can take control of their lives and begin the process of life-long learning.

 **EXPERIENCE**

 1971-1978 Experience as a Graduate Student

 Teaching Assistant:

 1971-1972 **Florida State University** - Introductory Biology

 1972-1978 **Brandeis University** - Introductory Psychology

 Physiological Psychology

 Statistics

 Experimental Methods Seminar

 Developmental Psychology

 Field Work in Developmental Psychology

 Instructor: 1978-1979 **Brandeis University** - Introductory Psychology

 1980-1985 **The University of Western Ontario** - Assistant Professor, University

 Research Fellow

As a Research Fellow, I was limited to one course per year of teaching.

 1981-1982 Psychology 100: **The Human Animal**

This was a course on experimental psychology for non-majors which allowed us to explore topics such as drugs, development of gender identity, definitions of brain death.

 1983 Psychology 485E: **Research Methods**

This course, co-taught with Dr. Susan Pepper, was a methodological and guidance course for the 80 students who were in the Fourth Year Honours Programme.

 1984 Psychology 383E: **Perception and Movement**

This was a fourth year course for honours students, teaching them about the many sensory inputs which combine to give humans information that they are moving. It included an essay and a laboratory project.

1985-present **The University of Lethbridge** - Assistant, Associate and Full Professor:

 1985-1998 Psychology 2100/3110: **Developmental Psychology**

This course is a general survey of child development, with a wide demand by psychology majors, pre-education students and Arts and Science majors as a breadth course. Its enrolment has risen from 60 to 120, and as it grows the assignments have changed. Writing requirements were previously an essay and commentaries on in-class films. Later, students learn the skill of writing definitions in a mid-term and final exam, and complete an essay entitled "Me as a Child" which integrates personal experience with theoretical information on child development, present a poster and interview a child. The format has changed gradually from lectures/exams to assignment-based.

 1986-1994 Psychology 3100: **Advanced Developmental Psychology**

This course demands in-depth work from students. A small class (limit 20) allows the classroom experience to be totally discussion. Students read and discuss papers on four themes: types of behaviour change, the child as active agent in the environment, dependence of behaviour change on brain processes and the inter-relationship of heredity and environment. They may choose to lead a discussion later in the semester. The laboratory component of the course teaches the skill of understanding behaviour through observation. Students complete five laboratory projects, then a half-semester independent project in pairs, reported by a poster.

 1986-present Psychology 3200/4325/3325/3360:  **Sensation and Perception**

This course focuses on humans' evaluation of incoming information and fosters oral communication skills. The small (limit 20) class is all discussion, on one or two chapters of the text around one question each week. The laboratory experience has changed from experiments in a two-week cycle of testing and statistical analysis of class data, which allowed students practical experience with statistics and teaches them the skill of writing laboratory reports, to oral and poster presentation. Since 2004 the format has been Inquiry learning has been in groups.

 1986-present Psychology 3820/3120: **The Psychology of Aging** - half course until

 1999

This course looks at human behaviour from the perspective of the adult life span, and I taught the half of the course which focuses on physiology, perception, memory and motor skills. Students evaluate research papers during my half of the course, and gain the skill of critical evaluation of the research literature. In 1993 we began group work; over the course students completed six assignments in groups of four. This allowed them to make real-life connections through practical work, and fostered the skill of working cooperatively with others. In 1995 we added a Royal Commission on Aging to give a class-based project and later changed it to an assessment of Lethbridge as a Senior Friendly City, presented by group leaders to the Seniors Forum at City Hall.

 1993, 1995, Psychology 4008/3000N/4550 (Special topics series): **Schizophrenia**

 1999, 2001, 2003-present

This course gives an understanding of deviant behaviour in all its aspects through a focus on one mental illness. It is predominantly student presentations so they gain the skill of organizing and carrying out verbal presentations. As well, students complete an essay and gain personal contact with those affected by the illness through the Schizophrenia Society of Lethbridge. All the components of the course are united and reflected upon by entries in a personal journal, and the whole gives students an overview of psychology and of people struggling with a disease.

 2000 Psychology 4550 (Special topic series): **Psychology of Alzheimer’s**. This

 course followed the same format as the one on Schizophrenia outlined above.

 1993-4 Arts & Science 3001: **Capstone Course**

This interdisciplinary course allows students to view broad topic areas from many perspectives, guided by two faculty members and over a full year. The combination of a whole year course and multiple viewpoints produced a fascinating perspective on learning and the best University experience for many class members.

 Fall, 1997 **Canadian Studies Lecture**: two Sections.

 Visiting Professor, Hokkaigakuen University, Sapporo, Japan.

The format of this course was lecture. The content focused on human-environment interaction, lifespan development, multiculturalism and change. As the students’ oral English was shaky to absent, a three to five page handout was prepared for each class and given to them in the previous lecture. There were two midterms and a final examination. They were not the easy multiple choice, but definition and explanation in lecture and capitalized in the handouts; they were allowed to choose to answer half of those provided.

 Fall 1997 **Canadian Studies:**  **Seminar** (with D.L. Mather)

 Visiting Professor, Hokkaigakuen University, Sapporo, Japan.

This smaller class was carried out as a traditional Seminar in Canada. On the same general topics, students had a mixture of Lecture, Essays, Individual and Group work in class and final Presentations by groups. This format was very foreign to the Japanese students, but they gradually increased their confidence, willingness to participate and fluency as the semester passed.

 1998-2006 Psychology 3500 **Abnormal Psychology**

This course offers a wide perspective on the many ways in which behaviour is abnormal. Students complete a variety of assignments - short tests of definitions, group paper assessments, opinions on special topics and a major paper. The emphasis is on learning by doing and understanding the wide scope and impact of abnormal behaviour.

Fall 2003, 2005, 2007 Psychology 3850  **Lifespan Development of Women**

Spring 2010

This course covers issues in lifespan development of particular importance to women (eg. body image, work family balance, menopause and hormone replacement therapy, widowhood). Students complete short tests of terms, half-hour presentations on important topics in groups, short paper on issues of interest from women presenters and a longer Opinion Paper as a substitute for a final exam.

Spring 2004 Psychology 3000 **Human-Animal Interactions**

This course explores the many ways in which we humans interact with the animals with whom we share the planet and the moral/ethical underpinnings of our behaviour. Students complete an interview of someone who works with animals, do a poster presentation on an ethical issue and finish with a short observational study of the interactions.

**Sponsorship of Students in Individual Study 1985-present**

**Graduate Student Supervisor:**

 **Doctoral Supervisor:**

Ruth Byrne, University of Vienna, 2002-2004

 Michi Kuba, University of Vienna, 2002-2004

 Dani Meisel, University of Vienna, 2002-2006

 **Commiittee Member:**

 Jessica Buckingham, Biology, University of Louisville, 2007-2009

 **Membership in Master’s Student Committee:**

David Sinn, Biology, Portland State University, 1999-2000

 Terry-Lynn Fox, Sociology, 2002-2005

 Heather Petherick, Management, 2003

 Hayley Mang, Sociology, 2004-2006

 Megan Smith, Education, 2007-

 **Graduate Courses:**

**Psychology 5990:** Graduate Course

Fall, 1998 Sandra Kolbl “Adolescence and depression”

Fall, 2001 Terry-Lynn Fox “Grandparenting”.

**Psychology 4995a, b**: Undergraduate Honours Thesis.

Fall 2000/Spring 2001 Heather O’Brien “Resilience in children”

Fall 2001/Spring 2002 Erin Butters “Affective responses to landscape”

Fall 2003/Spring 2004 Morgan Aho “Seasonal mood changes in students”

Fall 2004/Spring 2005 Crystal McLennan "Repetetive dieting: an illogical and risky

 behaviour"

Fall 2004/Spring 2005 Lisa Schulz "Looking ahead to marriage: what influences

 young adults' attitudes to marriage"

Fall 2004/Spring 2005 Yvonne Hindes "Attitudes of students and professors to

 university students with disabilities"

**Psychology 4990**: Investigative Research

Spring, 1986 Keith Houston “Aging and spatial memory"

Fall, 1986 Lisa Chan "Effects of noise on performance"

 Ildiko Gerencser "Aging and spatial performance"

Spring, 1987 Yvonne (Gautier) Unrau "Attitudes to child discipline"

 Deanne Tashiro "Sex role stereotypes"

 Jim Miklos "Tactile perception and laterality"

 Virene French "Daily cycles and time allocation of students"

Fall, 1987 Jacquie Werth "Parental attachment in students"

 Zen Faulkes "Psychophysics of time perception"

Spring, 1988 Pat Buck "Eye movements of alcoholics"

Spring, 1989 Lorna Orr "Tactile and visuospatial memory in aging"

 Kim Pierson "Tactile exploration in infants"

 Jacquie Laporte "Spatial memory of children"

Spring, 1990 Lydia Hecker "Risk and schizophrenia"

Spring, 1991 Carla Buziak "Students' directions and life goals"

Summer-Fall, 1991 Arlene Locking "Language development in twins"

Fall, 1991 Carol Griffiths "Thinking and schizophrenia”

 Derice Bittorf "Behaviour differences in crabs"

Summer, 1995 Colin Zieber “The effect of a geriatric intervention

 program on elderly users”

Spring, 2000 Julia Morris “Attitudes and the glass ceiling:

Spring, 2000 Angela Carter “Attitudes towards depression”

Spring, 2000 Danille Lazzaretto “Attitudes towards mental illness”

Spring 2001 Susan Cooper “Attribution, perfectionism and depression”

Summer, 2001 Angela Provost “Late-life depression”

Spring, 2002 Elaine Loza “Student stereotypes about aging”

Spring, 2002 Terri Jackson “Drugs and mood disorder”

Spring, 2002 Lyndsay Stoddard “The psychology of student eating”

Fall, 2002 Jessi Nesbitt “Hospitalization and the mentally ill”

Fall, 2005 Jennifer Ellis-Toddington "Experiences of Disabled Students"

Fall, 2006 Chad Rideout "Opinions of Students with Disabilities"

Spring, 2009 Kim Petersen ”Student interactions in group-based Inquiry

 learning”

Summer, 2009 Faren Honess “Sexuality in the Elderly”

Spring, 2010 Lori Tucker “Homelessness Attitudes and Knowledge”

**Psychology 3990**: Library-based Research

Spring, 1986 Yvonne Gautier "Child abuse prevention"

 Jacquie Werth "Biological factors influencing suicide"

Spring, 1988 Zen Faulkes "Locomotion"

Summer, 1988 Jacquie Laporte "Spatial memory in preschool children"

 Twila Harris "Review of Alzheimer's disease and memory"

Fall, 1988 Kim Pierson "Tactile exploration of children"

Spring, 1989 Elene Thiesson "Palliative care"

Spring, 1990 Rhonda Desjardins-Kunkel "Institutionalization and cognitive functioning in the elderly"

Summer, 1990 Jonathan Lee "Children's play"

Fall, 1990 Heather Klassen "Depression"

Spring, 1991 Carol Griffiths "Schizophrenia"

Summer-Fall, 1991 Arlene Locking "Stuttering"

Fall, 1991 Linda Shaskin "Women and dieting"

 Karen Nicholson "Exercise and depression"

 Terumi Yangihara "Grandparenting"

 Sharon Rowntree "A study of Alzheimer's disease"

Spring 1993 Marcus Lyon "The effect of Down's syndrome on the family"

 Luke Sander "Institutionalization"

Summer 1993 Miranda Lubbers "Day care and child development"

Summer 1994 Eloise Glover "Development of language"

Summer/Fall, 1994 Craig Murell "Schizophrenia and brain development"

Fall, 1994 Kimberley Irving "Brain damage and abnormal behaviour development"

Fall, 1995 Valerie Briltz “Dyslexia”

 Tim Green “Tactile sensation”

 Dominica Smid-Provost “Blackfoot childhood”

 Malcom Gibb “Where is the University going?”

Spring, 1996 Kolleen Koenen “Cross-country comparison on retirement”

 Afra Foroud “Autism”

 Valerie Briltz Odell “Psycholinguistics”

Fall, 1996 Louise Groves “Self-esteem”

 Michelle Sawa “Children and Family Problems”

Spring, 1997 Pat Spetch “Developmental motor disorders”

 Ariana McCulloch “Seasonal Affective Disorder”

 Tanya Clark “Multiculturalism and Children”

Spring, 1998 Sheri McInnes “The Psychology of Children’s literature”

Spring, 2000 Dawn McIntyre “Antisocial personality disorder in women”

Spring, 2000 Heather O’Brien “Resilience throughout life”

Spring, 2001 Susan Cooper “Culture, gender and mood disorders”

Spring, 2001 Erin Butters “Health psychology and wellness”

Spring, 2001 Elizabeth Elder “Lifespan approach to relationships”

Spring, 2001 Kirsten Taylor “Teaching about Alzheimer’s disease”

Spring, 2001 Cinder Inglis “Gender and depression”

Fall, 2001 David Egert “Aggression in Adolescence”

Fall, 2001 Elaine Loza “Memory Disorders in the Elderly”

Fall, 2001 Valerie Sipos “Depression and the Workplace”

Fall, 2001 Lyndsay Stoddard “Disordered Eating”

Fall, 2001 Terri Jackson “Austim”

Spring, 2002 Jessi Nesbitt “The mentally ill and the law”

Spring, 2002 Abby Pinder “Phantom limbs”

Summer, 2002 Lyndsay Engel “Alzheimer’s disease and ethics”

Fall, 2002 Jen Royston “Antisocial personality disorder”

Spring, 2003 Kristi Murphy “Maturity”

Spring, 2003 Morgan Aho “Seasonal Affective Disorder”

Fall, 2003 Eliza Everts “Outdoor Education”

Spring, 2004 Crystal McLennan “Disordered Eating”

Spring, 2004 Lisa Schultz “People in Marriage”

Spring, 2004 Chelsea Dixon “Anorexia and neuropsychophamaracology”

Summer, 2004 Mike Morgan “Sleep Disorders”

Spring, 2005 Christine Lu "Stress and Coping"

Spring, 2008 Meagan deJong “Attitudes towards Schizophrenia”

Spring, 2009 Melissa Francis “Financial abuse of elders”

Summer, 2009 Faron Honess “Attitudes of seniors to sexuality”

**Summer Studentships**

1986 Kathy Rach Alberta Heritage Foundation for Medical Research

 "Spatial memory of alcoholics"

1987 Lorna Orr Alberta Heritage Foundation for Medical Research "Verbal and visual spatial memory and aging"

1988 Zen Faulkes Natural Sciences and Engineering Research Council "Octopus walking”

**Applied Studies**: Practical/Scholarly Combination

Summer, 1988 Lorna Orr "Caregivers of Alzheimer's"

 (with R. Arms)

Summer, 1988 Liana Pigat "Issues of care in Alzheimer's"

 (with R. Arms)

Spring, 1989 Alfee Ho "Storytelling"

Summer, 1991 Rhonda Desjardins-Kunkel "Nursing home care and Alzheimer's"

Summer, 1992 Nicole Marchand "Alzheimer's disease and access to the outdoors"

Summer, 1993 Catherine Bevan "Communication patterns in people with Alzheimer's disease"

 Nicole Marchand "A walled garden, wandering and Alzheimer's"

Summer, 1994 Dana Nemecek “Alzheimer’s disease and outdoor access”

Spring, 1995 Angela Koenders “A survey of teaching methods”

Spr/Sum, 1995 Shefali Somani “A guide to the Psychology major”

Fall/Spr,1995-6 Iris Dahlgren “Childhood Autism”

Summer, 1996 Dominica Smid-Provost “Native Childhood: the Curriculum”

 Dierdre Titley “Seriously-handicapped children”

Sum/Fall, 1996 Tamara Wickstrom Jones “Pedagogy in human development”

Spring, 1998 Domenica Smid-Provost “Children’s Play”

Summer, 1998 Jason Chinn “Observation of Squid”

Fall, 1998 Anu Sharma “Psychology Teaching and Marking”

 Margaret Miles “Teaching and Psychology”

 Roberto Hernandez “Elders in Health Care”

 Michelle Burke “Developmental basis of criminality”

 Sarah Lynn Russell “Scientific Aspects of Criminality”

 Jennifer Simons “Development and Young Offenders”

Spring, 2000 Julia Morris “Feminist theories, psychology and women”

Fall, 2000 Ryan Wynder “ Community Psychology and Practice”

Fall, 2000 Tobi Martin “Psychology of Adolescent Offenders”

Spring, 2001 Rebecca Labbe “The psychology of the mentally challenged”

Spring, 2001 Sandra Saegert “Community mental health”

Spring, 2001 Angela Champagne “Student learning styles”

Spring, 2001 Rhonda Whitely “Eating disorders in the elderly”

Spring, 2001 Aaron Burke “Post-traumatic stress disorder in children”

Spring, 2001 Jessie Nesbitt “Depression and suicide”

Fall, 2001 Lisa Lehane “Psychology in the Community”

Fall, 2001 Linda LeMaistre “Psychology of Prison Inmates”

Spring, 2002 Aleya Mohammed “Caregiving and dementia”

Spring, 2002 Linda LeMaistre “The psychology of crime”

Summer, 2002 Benedict Chou “Alzheimer and care”

Fall, 2002 Kelly Raymond “Children’s anxieties and coping strategies”

 Mark Tymchyra “Mental disorders and crime”

 Stacy Hooper “Crime and mental illness”

 Shelina Nurani “Issues in Childhood”

Spring, 2003 Benedict Chou “Issues in Palliative Care”

Fall, 2003 Jackie Cheng “Workshops for Seniors”

Fall, 2003 Brad Moser “The Mentally Ill and the Community”

Spring, 2004 Michelle Chan “The Psychology of Presentations”

Spring, 2004 Erin Williscroft “Care and Support for the Elderly”

Spring, 2004 Chelsea Dixon “The Biopsychology of Schizophernia”

Summer, 2004 Yvonne Hindes “Psychology of Childhood Disorders”

 Fall, 2004 Michelle Chan "Presentation Coaching"

 Erin Williscroft "Educating Seniors on Aging"

 August Wensmann "Maladaptive Behaviour in Youth"

Spring, 2005 Chad Rideout "Disabilities of Seniors"

 Ruth Braund "Schizophrenia and Society"

 Twyla Patterson "Behavioural Disorders of Youth"

 Tya Hibbert "Divorce and Children"

 Kerby Elfring "Abnormality and Children's Stories'

Summer, 2005 Sheri Rempel "Seniors in Formal Care"

 Hayley Hellum "Assisted Living and the Elderly"

 Ashley Dreger "Disaster, Distress, Relief, and Coping"

Fall 2005 Christine Lu "Homelessness"

 Debra Gazeley "Coping with pain"

 Ken Seaman "Physical training and disability"

Spring, 2006 Carol Stokell "Elder abuse awareness"

 Ashley Thomson "Schizophrenia and coping strategies"

 Nicole Hamel "Educating children about schizophrenia"

 Ruth Braun "Introduction to research proposal writing"

 Shauna Frezell "Disabilities and access"

Summer, 2006 Jessica Renney "Children with problems"

 Natasha Yuill "Issues in formal care for the elderly"

 Kendra Niwa "Adolescents in crisis"

 Nicole Mitchell "Children with disabilities"

 Chelsea Flaman "Understanding the elderly in care"

 Carrie Clark "Children with disabilities" (with Angela Irvine)

Fall, 2006 Jennifer-Laura Kelly "Schizophrenia and the public"

Summer, 2007 Meagan deJong "Living with Schizophrenia"

 Amber Jensen "Children with behavioural problems"

Fall, 2007 Ashley Hewitt “Schizophrenia and Society”

Melisha Lassey “Overcoming Disability”
Bryan Bullock “Schizophrenia and Coping”

Spring, 2008 Raina Alam “Perspectives on Schizophrenia”

 Natalie Zmidzinksi “Coping strategies and Schizophrenia”

 Keon Habibi “The biology of Schizophrenia”

Summer, 2008 Salina Dhoot “Women and Abuse”

 Angela Bergstrom “Children with Down syndrome”

Fall, 2008 Ryan Mallard “Dealing with schizophrenia”

 Melissa Francis “Self-esteem in adolescent girls”

 Farrah Al-Alawi “Biopsychological effects of schizophrenia”

Spring, 2009 Ryan Mallard “Culture and Psychology”

 Micaela deBeyer “Language disorders in Children”

 Costain Lawless “Caring for the Dependant Elderly”

Summer, 2009 Shannon Littke “Art therapy with the elderly”

Fall, 2009 Brittany Bannerman “Education and schizophrenia”

Spring, 2010 Tysen Heller “Schizophrenia treatment and coping”

 Salma Kabir “Immigrant women”

 Mike Sommerfeld “Schizophrenia and the family”

Summer, 2010 Mike Sommerfeld “Recovery from mental illness”

 Michelle Leafloor “Mentoring young girls”

RESEARCH-RELATED SERVICE (since July 1985):

Seminars to the Psychology Department Summer Series:

 1986 "Temporal organization of behaviour of *Octopus vulgaris*."

 1987 "Interaction, interference and allocation in spatial memory."

 "Attention and eye movement problems of schizophrenics."

 1988 "Ethical considerations in treatment of invertebrates."

 1989 "Aspects of foraging in Octopus vulgaris."

 1990 "Foraging, movement and energetics of octopuses."

 1991 "Eye movements of schizophrenics."

 1992 "Octopuses have personalities."

 1993 "Do animals think?"

 1994 "Octopuses and Clams: The Packaging Problem"

 1996 “How do Octopuses use their arms?”

 1998 “Home on the range: where the deer and the antelope and the *octopus* play?”

 2000 “Mating games squid play”.

 2001 “What are squid saying with a Zebra display?”

 2002 “Do squid make a visual language on their skin?”

 2003 “It’s dangerous out there: squid predator avoidance strategies”

 2004 “Development of behaviour in Cephalopods”

Seminars at the University of Lethbridge

 1986 Biology Department Seminar Series, "Octopod social behaviour."

 1986 Nursing Department Seminar Series, "Markers for the inheritance of neural

 degenerative diseases."

 1989 Sociology Department, "Does sociobiology advocate rape?"

 1991 Science Week, Poster presentation, "Personalities" of octopuses."

 1992 Science Week, Poster presentation, "Visuo-spatial memory impairment in

 schizophrenia: interactions in a dual naming and replacement task."

 1993 Biology Department Seminar Series, "Foraging strategies and survival tactics of octopuses."

 1997 Issues in the Social Sciences “Feminism, backlash and women’s participation in science”.

 1998 New Ideas in the Social Sciences and Humanities Seminar “Should ethics

 limit Science?”

 2008 Philosophy Department, Department Conference, “Food for thought”, Food of the planet.

 2009 Biology Department “Non-terrestrial intelligence”

Seminars Elsewhere

 1985 Bermuda Biological Station, "Octopod behaviour."

 1986 Psychology Department, University of Alberta, "Genetic markers and eye movements of schizophrenics."

 1987 Department of Kinesiology, University of Waterloo, "Sources of the oculomotor deficits of schizophrenics."

 1987 Psychology Department, Mount Sinai Hospital, Toronto, "Sources of the oculomotor deficits of schizophrenics."

 1987 Department of Psychiatry, University of Ottawa, "Sources of the oculomotor deficits of schizophrenics."

 1988 Nencki Institute of Physiology, Warsaw, "Eye movement defects of

 schizophrenics."

 1988 Laboratoire d'ethologie et sociobiologie, Universite de Paris XIII, Villetaneuse, "Spatial memory and foraging of octopuses."

 1988 Bermuda Biological Station, "Field activity of juvenile octopuses in Bermuda."

 1989 Psychology Department, University of Alberta, "Behaviour of octopuses in the

 field."

 1989 Bermuda Biological Station, "Aspects of the behaviour of *Octopus vulgaris* in the field."

1. Schizophrenia Study Group, London, Ontario, "Eye movements of schizophrenics."

1996 Biology Department, Dalhousie University, “ How an Octopus uses its arms”

 1997 WISEST, University of Alberta “All gone but the Cheshire Cat smile: three ways women scientists disappear”.

 1999 Biology Department, Dalhousie University “Mating games squid play”.

 1999 Psychology Department, Memorial University “Mating Games Squid play”.

1999 Psychology Department, Memorial University “Mismatching women to science”.

 1999 Biology Department, Humbolt State University “Mating games squid play”.

 2000 Department of Organismal Biology, Portland State University “Mating strategies of Sepioid squid”.

 2001 Biology Department, Alaska Pacific University, “Mating games squid play”.

 2002 Konrad Lorenz Institute for Evolution and Cognition, Vienna, “Squid language: what language? What’s language”

2006 Konrad Lorenz Institute for Evolution and Cognition, Vienna, "Do cephalopods have consciousness?"

2009 Aquarium of the Pacific, Long Beach, CA, “Do squid make a visual language on their skin?”

2009 Universidade Federal do Rio Grande do Norte, Brazil, “Non-terrestrial intelligence”.

**Reviewing Activities Journal Reviewing:**

 Animal Behaviour

Animal Cognition

American Journal of Malacology

 American Malacological Bulletin

 Animal Cognition

Aquatic Biology

Behavior Processes

Biological Psychiatry

Bulletin of Marine Science

Canadian Field Naturalist

Choice (Library book review journal), average of three per year.

Ethology

Fisheries Research

Fish Biology and Fisheries

International Journal of Comparative Psychology

Journal of Abnormal Psychology

Journal of Applied Animal Welfare Science

Journal of Cephalopod Biology

Journal of Comparative Psychology

Journal of Ethology

Journal of Experimental Biology

Journal of Experimental Marine Biology and Ecology

Journal of Experimental Psychology: Human Perception and Performance

Journal of the Marine Biological Association of the UK

Journal of Neurophysiology

Journal of Psychiatry and Neuroscience

Journal of Zoology, London

Laterality

Marine Ecology Progress Series

Marine Biology

Marine Biology Research

Nature

New Zealand Journal of Marine and Freshwater Research

Perceptual Motor Skills

Physiology and Behavior

Psychophysiology

Reviews in Fish Biology and Fisheries Research

Scientia Marina

Technology Studies

Veliger

Vie Mileu

**Other Publications**

Review of Moynihan, "Communication and noncommunication in Cephalopods." *Animal Behaviour* *34*, 1587-1588, 1986.

Review of Pepler & Rubin, eds., "The Development and Treatment of Childhood Aggression." *Aggressive Behaviour* *19*, 157-158.

The Difficulty of Modeling for Group Interactions: Comments on Herschel, R.T., Crossland, M.D. & Noel, T. "An Analysis of Four Commonly-used Group Tasks for Gender Bias". Peer reviewed reaction *Technology Studies* *1/2*, 223-225, 1994, (with D.L. Mather).

Having a teaching philosophy*. Teaching and Learning Exchange* (U. Of A. Teaching Newsletter) *2*(2), 1995.

Systemic Discrimination and Career Blockage. “Minority Women and Technology.” Comments on James, K., Khoo, G. and Harbold, D. *Technology Studies* *3/1*, 124-126, 1996. Peer reviewed commentary.

 “Individual Differences in Behavior” *Handbook of Comparative Psychology* (1998).

“Behavior of Cephalopods”. *Handbook of Comparative Psychology* (1998).

Feminism, backlash and women’s participation in science [Online]. Available: http://home.uleth.ca/lib/seminars/jmather.shtml [1997, April 04].

* Women and the corporate culture of science: the Task Force recommendations for the role of NSERC. CAUT Bulletin *44* (6), 9. (1997)
* Book review: Scaling the ivory tower: stories from women in Business School faculties. CAUT Bulletin *44* (7), 12. (1997)

Book review: Donald Kennedy: Academic Duty, *CAUT Bulletin* *45* (7,11) 1998.

Editor, CAUT Bulletin Status of Women Supplement *45* (4), April, 1998.

Senior Academic Women and the Career - Family Balance. *CAUT Bulletin Status of Women Supplement 46*, 4, 10. (1998)

“What Behaviour Can We Expect of Octopuses?” In: The Cephalopod Page (http://is.dal.ca/~ceph/wood.html) Ed: James Wood.

Balancing work and family. *CAUT Bulletin Status of Women Supplement, 47*, (4), 7. April, 2000.

Worrying about Alzheimer’s. *Lethbridge Senior Citizens’ Organization Bulletin*. January, 2000.

“Illusory visual motion perception”. *Psychological Sketches* (4th ed.). 87-93. J.R. Vokey and S.W. Allen, eds., Department of Psychology, The University of Lethbridge. 1999.

“Where does schizophrenia come from?” *Psychological Sketches* (4th ed). 81-86. J.R. Vokey and S.W. Allen, eds., Department of Psychology, The University of Lethbridge. 1999.

“Attitudes and attitude change: the example of invertebrates”. *Psychological Sketches* (7th ed., revised). J.R. Vokey and S.W. Allen, eds., Department of Psychology, The University of Lethbridge. 2005.

* Mather, J.A. Finding, reporting and understanding elder abuse in J.R. Vokey and S.W. Allen, eds. *Psychological Sketches* (9th ed.), 107-112, Department of Psychology, University of Lethbridge, 2008.

“Mating games squid play”. In: The Cephalopod Page, <http://is.dal.ca/~cep/TCP/Mather.html>.

“Octopuses are smart suckers”, http://manandmollusc.net/Smartsuckers.html, 28/05/00.

“The squid soap opera”. The Cephalopod Page (http://is.dal.ca/~ceph/TCP/). Webmaster. Wood, J.B.

“Boring”. The Cephalopod Page (<http://is.dal.ca/~ceph/TCP/>).

***Publications in The Encyclopedia of Animal Behavior (2004):***

Cephalopods (Sidebar: Do squid make a language on their skin?), Volume 1, 230-234.

 Animal Colors (Sidebar: how do flowers and bees match?), Volume 1, 92-97.

 Careers in Animal Behavior (with M. Crowe), Volume 1, p. 142-148.

Report from a Workshop on *Idiosepius*, the smallest Cephalopod. In The Cephalopod page.

(see citations above).

Teaching Human-Animal Interactions,*The Encylopedia of Animal-Human Relationships*, Westport, CT: Greenwood, 2007, 684-686. (2007)

"You want me to do what? Barriers to inquiry learning for university teachers". *Experiences with Inquiry Learning*, 95-103. Hamilton, ON: CELT. (2007)

Eight arms, with attitude. *Natural History* February, 2007, 30-36.

What did I get myself in for? The experience of graduate school. *Proceedings of the* *Multidisciplinary Graduate Research Conference 1 (1),* 151-157 (2007).

Mather, J.A. 2010. Octopus*. Encyclopedia of Animal Behaviour*. Breed, M.D. and Moore, J., eds., Academic Press, Oxford.

Mather, J.A. Cephalopod intelligence. *Oxford Handbook of Comparative and Evolutionary Psychology*. In press.

Presentations to the Psychology Club

 1990 "Markers for vulnerability to schizophrenia."

 1992 "Why we think schizophrenia is a brain disease."

 1997 “Constructing the Psychology Major”

 2005, 2006, Careers in Psychology: planning for afterwards

 2007, 2008, 2009

Information Presented to the Public

1988 Interview, Jeff Collins, CBC Calgary, "Ethical problems of research into genetic markers for schizophrenia."

 1991 Interview, BBC radio, Natural History program, "Octopus Personalities."

 1992 BBC Wildlife magazine, "Octopersonality."

1992 Presentation to the Schizophrenia Society of Lethbridge, "Why we think schizophrenia is a brain disease."

 1990-1994 Lethbridge Herald Explorations Series

 1990 "Research on octopus behavior takes professor to Bermuda"

 1991 "Windows to the mind. What do eye movements tell us about schizophrenia?"

 1992 "Do animals have personalities?"

 1993 "A walled garden and wandering in Alzheimer's"

 1994 "The colorful octopus"

 1996 *Aperture*: July 8, 1996 on Society for Teaching and Learning in Higher Education *Aperture*: Dec. 2, 1996 on CAUT-Status of Women Conference

 1996 Film, Discovery Canada, “Thinks like an Animal”, (one of five interviewed).

 1998 ABS Members in the News, “Suckers for Fun” (Academic Press *Daily in Sight*

- August 1998).

 1999 “Mating games squid play”, Sand Dollar Dive and Education Centre, Bonaire.

 1999 “Mating games squid play”. Lethbridge Naturalists’ Society.

 2000 “In an octopus’ garden”. Horizon Air magazine. July 2000, 11-18.

 2001 “Squid mating games”. Habitat Dive Center, Bonaire.

 2001 “Speaking squiddish”. Allen Abel, Saturday Night, August 11, 2001.

2002 “Do squid make a visual language on their skin?” Idea City, Toronto, June, 2002.

2002 Animal Behaviour Society: Reviewer, Student Research Grants, Judge, Film

 contest at the Annual Conference.

 2003 Through the eye of an Octopus. Eric Scigliano, Discover, October.

 2004 “Tentacles”. Discover film, Danny Mauro, July.

* 2004- Animal Behaviour Society: Judge Undergraduate Student Poster Competition, Judge Competition for Outstanding Teacher, 2005.

 2006 "Do squid make a visual language on their skin?" Lecture in a series on

 Animal Communication, Cosmo Caixa Museum, Madrid, Spain.

 2006 The Animal Self. Charles Siebert, New York Times Magazine, January 22nd.

2008 How smart is the octopus? Carl Zimmer, Slate.

2008 The Coleoid group. Lecture for the Alberta Palaeontological Society, Calgary.

2009 “Are octopuses smart?” Scientific American: Ask the expert.

2009 “Non-terrestrial intelligence”. The Public Professor, Lethbridge Herald, May 1.

2009 “Women Professors in the Canadian university system”, The Public Professor, Lethbridge Herald, November 28.

**TEACHING-RELATED SERVICE**

1986-present Annual Seminar, Psychology Club "Life after U of L: graduate school, professional school or a real job."

1987 Outside professor, PhD thesis committee, Pamela Cooper, Psychology,

 University of Ottawa.

1988 Co-instructor (with four others) Management 3733: Women and Men in Employment, Spring

1990 Workshop, University of Lethbridge Faculty Association, "Teaching upper-level students."

1990-1995 Department of Psychology Student Advisor (ad hoc).

1990-1992 Faculty advisor, Applied Studies Program.

1991 Seminar, Psychology Club "What is the Psychology major?"

1992 Faculty of Arts & Science Retreat on Liberal Education, Participant

1992-1996 Teaching in Focus peer teaching group.

1992,1993,1996, Society for Teaching and Learning in Higher Education annual

1997, 1999, 2002, conference.

2004, 2007, 2008

1992-1996 Teaching Fund Committee.

1993-1995, 2009- Arts & Science Liberal Education Committee Chair, 1993.

 Retreat on the First Year Experience.

1993 Seminar on the First Year Experience, Calgary, Participant

1993-1996 Arts & Science Research and Teaching Committee.

1993 Presentation to the Faculty of Management Teaching Seminar

 series "Turning the learning over to the student."

1994-1996 Organizer: Faculty Development Seminar Series

1994 Seminar to University of Lethbridge Faculty Association “Making a Teaching

Dossier”

1993, 1995 Seminar to University of Lethbridge Faculty Association “Getting Tenure”

2007, 2008 Seminar to University of Lethbridge Faculty Association “Presenting your

teaching”

1996 Mentor: First year students

1998 Teaching Seminar: “Non-traditional teaching”

2002 Presentation, Teaching Development Days, “Student learning styles and

 professors’ expectations of them.”

2008 Animal Behavior Society Workshop on the Graduate School experience

2009 Animal Behavior Society Workshop on Postdocs

2003-2004 Committee on Research and Teaching, Arts and Science.

2004 Poster, Teaching Development Days “Students’ Evaluation of male and female teachers’ (with N. Acharya and M. Hawkins)

2004, 2005, 2006, Co-organizer (with P. Tanaka and N. Jadavji), seminar 'What do I do with

2007 a Psychology degree?" for undergraduate majors.

2007-2008 CAETL Teaching Fellow

2007 Nominated for 3M Teaching Fellowship 2008.

2009 Nominated for Distinguished Teacher

 **SERVICE ACTIVITIES ASSOCIATED WITH AGING AND ALZHEIMER'S DISEASE**

1988-1997 Alzheimer Society for Lethbridge and Area:

 Member of the Board, 1988-1999.

 Hiring Committee, 1988

 Secretary, 1989-1990

Chair of the Research Committee, 1989-present; organized a research funding competition, 1992-present.

1986 Lethbridge Senior Center, Presentation to Senior Support group "Good things about growing old."

1988, 1990 CFCN-TV, "Mornings with Elisha" Interview on Alzheimer's disease

1988 University of Lethbridge School of Nursing Conference Participant, "Health

 Maintenance."

1988 Presentation to the University of Lethbridge Senate, "The Alzheimer Project: combining teaching, research and service."

1989 Seminars on "The impact of Alzheimer's disease on caregivers"

 Professional Secretaries International

 Lethbridge Regional Hospital, Long-term care group

 Lethbridge Regional Hospital, Long-term care nurses

 Interagency Support Group for Seniors

 Alberta Mental Health Advisory Council

1989 Lethbridge Public Library Annual Lecture on Alzheimer's Disease "Caregivers and Alzheimer's".

1990 Lethbridge Regional Hospital, Auxiliary, Long-term care nurses "The problems of caregivers of people with Alzheimer's disease".

1991 Vegreville Association for the Handicapped, Conference on Aging:

Keynote Speaker: " The good and the not-so-good news about our bodies getting older."

Presentation: "Impact of Alzheimer's disease on the family."

1992 CATV, Interview with Renee Kolaska "Alzheimer's Disease".

1992 Alberta Government consultation on Seniors and Health Care,

 "Looking to the Future", Participant.

1992-1997 Articles in the Newsletter of the Alzheimer Society (Three per year).

1993 St. Michael's Pastoral Care group, "The impact of Alzheimer's disease".

1995 Annual Conference, Alzheimer Society of Canada, Edmonton

1997 Presentation at Green Acres Care Centre, “Alzheimer’s Research”

1998 Presentation to the Extendicare Support Group, “Dementia”

1999-present Member, Lethbridge Seniors Community Forum - Hot Line Committee, Retreat, November 2001.

Presentation “Making a Senior Friendly City” by the Psychology of Aging class.

1999, 2001. 2002, 2004, 2006: all these years.

Presentations by students:

Rhonda Whitely “Nutritional difficulties in Seniors”, Kirsten Nordin “A computer-based training program for people working with Alzheimers”, Elaine Loza “Students’ view of seniors”. Shauna Frezell "Access to city buildings for individuals with motor disabilities".

1999 Government of Alberta One-day Focus Group, Aging Together - Planning for the Future.

2000-2002 Member, Coulee Center Advisory Committee, Urban Environmental Management Workshop, November 2000.

 2001 Member, Ecosystem Environment Management Committee, City of Lethbridge.

2003-2004 Board member, Seniors LINKS.

2003 Presentation at Alzheimer Society Coffee Break Opener “Losing your memory: now what?” September.

2003 Presentation at Lethbridge Senior Citizens’ Organization as part of Lethbridge

Regional Science Festival. “Alzheimer’s and memory loss: coping”. October 2003.

2003, 2004, 2005 Presentation at Nor-Bridge Seniors’ Center, series on Successful Aging, "Losing your memory".

2008 “Grieving the losses”. Alzheimer Caregiver Seminar Series.

 **SERVICE ACTIVITIES ASSOCIATED WITH GENDER ISSUES**

1988-2004 University of Lethbridge Faculty Association Gender Issues Committee:

 Founder and Chair, 1988-1989, Member, 1989-1990.

 Past Chair, 1993-1995, Chair 1995-1996, 1999-2002. Past Chair,

 2002-2004 .

1987, 1988, 1991, Canadian Association of University Teachers Status of Women Conference

1993, 1994, 2000 Participant

1988 Women's Studies Research Unit Conference Participant, Saskatoon.

1989 Presentation to University of Lethbridge Faculty Association Workshop on Hiring, "Fair hiring practices."

1989 Presentation to Dean's Council, "On Hiring Women".

1989-1990 Faculty of Arts & Science, Affirmative Action Committee.

1989 Co-sponsor (with R. Anderson), Inclusive Language Policy.

1989 CFAC-TV Interview with Vaughan Hembroff, "Against the Grain" on Inclusive Language.

1991-1993 Member, ad hoc Women's Issues Committee, Animal Behaviour Society.

Animal Behaviour Society 28th Annual Meeting, 1992, "Making it through the system."

1992 Project Minerva (science for girls), Fort MacLeod.

 Panel member on opportunities in science.

 Workshop on physics "No, no, Humpty Dumpty--no, no."

1993 Seminar, University of Lethbridge Feminist Pedagogy Series, "Primate

 sexism."

1995-1996 Member, Women’s Studies Committee

1995-1999 Member, CAUT Status of Women Committee

1996 Organizer, CAUT Status of Women Conference

1997 Presentation to the Women’s Studies and Women in Science Classes at University of Alberta, “Where are all the women scientists?”

1997 Ideas in the Social Sciences and Humanities Seminar “Feminism, and women’s participation in science”.

1998-present Member, Alberta Women’s Science Network.

1999 Meeting the Challenges of Work and Family: Doing Justice to all aspects of your life. Workshop by the Gender Issues Caucus of the University of Lethbridge Faculty Association Presentation “What’s the Problem”?

1999-2002 Member, Advisory Committee for the NSERC Prairie Chair in Women in Science and Engineering.

2001 Seminar: ULFA Gender Issues Caucus: study of Work/Life Balance.

2001 Balancing work and family. Animal Behaviour Society Annual Meeting, Evening workshop.

2002 Workshop, “The future of gerontological education and research in Alberta”, Calgary, October, Alberta Association of Gerontology.

2002 GI Caucus “Balancing work and life”.

2003 Presentation at Women in leadership conference, Canmore, “Women in

 Science” (with L. Pilanrki), April.

2004 GI Caucus: "Making a worker-friendly university”

2005 Presentation to Women's Studies class: "Why science made a feminist out of

 me."

2005 Member, Diversity Committee

 **SERVICE ACTIVITIES ASSOCIATED WITH ETHICAL ISSUES**

1986-1990 Animal Behaviour Society, Animal Care Committee.

 Review of papers and discussion on care issues.

1995 Bylaws and Standard Committee.

1987-present Canadian Council of Animal Care, Invertebrate Committee.

1990 Arts & Science Human Subjects Research Ethics Committee.

1990 Cephalopod International Advisory Council Newsletter "Animal care issues in

 Cephalopod research."

1990-1992 University of Lethbridge Human Subjects Research Committee.

 Chair, 1990-1991.

2005, 2009 Advisor on invertebrates and ethics for UK Animal Welfare Bill and EU

 research ethics advisory council.

 **SERVICE TO THE UNIVERSITY OF LETHBRIDGE FACULTY ASSOCIATION**

1986-1987, 2001 Nominating Committee.

1988-1989, 1993,

 1995-1996 Member of the Executive.

1987-1993 Representative to the Faculty Travel Committee.

 Chair, 1988-1993.

1991 Workshop on Bargaining, Participant

1993 Faculty Handbook Negotiating Committee.

1993-1995 Grievance Committee.

1995-1996 Delegate to CAFA

1995-1997, Gender Issues Committee/Caucus,

1998-2002 Chair

2001 Nominating Committee

2003-2007 Gender Issues Committee/Caucus, Past Chair

 **OTHER SERVICE**

1990-1991, General Faculties Council.

1996-1997, 1999-2006 GFC Executive

1999-2001

1991 Joint GFC-Board Committee on Administrator Reviews.

 Search Committees:

 Department of Mathematics, 1990-1, 1993-4.

 Department of Geography, 1992, 1997.

 Department of Chemistry and Biochemistry, 2001-02.

 Department of Philosophy, 2004-05.

Department of Chemistry and Biochemistry, 2009-10.

 Salary, tenure and promotion committees:

 Department of Biology, 1987-1988.

 Department of Physics, 1990-1991.

 Department of Sociology, 2003-04.

 Faculty of Health Sciences, 2003-04.

Writing Program, 2008

Department of Chemistry and Biochemistry, 2009-10.

2005-2006 Arts and Science Salary, Tenure and Promotion Committee.

1999-2001 Arts and Science member, Education Council.

2001-2002, 2005-06 University Budget Committee

1987 Presentation to Lethbridge Twins and Triplets Club, "The impact of the child on the family."

1989 Volunteer training, Sexual Assault Center, "Child social development."

1990 Presentation to St. Michael's Hospital Prenatal Classes Reunion, "Impact of the child on the family."

1998 Presentation to the Barons-Eureka-Warner Community Health Center: “Bonding Revisited”.

2002-2005 Ingrid Speaker Medal for Distinguished Research, Scholarship or Performance Endowment committee.

2005 Member of Senate, University of Lethbridge.

2003, 2004, Marshal of the BA Graduands, Spring.

2006, 2007, 2009

2007, 2008 Marshal of the Faculty, Spring.

Updated 27 April 2011