I. ACADEMIC QUALIFICATIONS

Degrees:

Ph.D. (UBC; Zoology [genetics and comparative genomics])
M.Sc. (UBC; Microbiology and Immunology)
B.Sc. (UBC; Microbiology and Immunology)
B.A. (SFU; Cognitive and Learning Psychology)
(M.Ed. [In progress via distance education, WGU])

Professional Certifications:

AHI(AMT) (Allied Heath Instructor, American Medical Technologists)
RMCCM (Registered Microbiologist, Canadian College of Microbiologists)

Memberships:

Centre for Health Education Scholarship (CHES, UBC Faculty of Medicine)
Association of College and University Biology Educators (ACUBE)

II. EMPLOYMENT HISTORY

Education Related:

Instructor (Microbiology), BCIT Basic Health Sciences Department. 2013-present
Instructor (Biology), Columbia College. 2013-present.
Course Instructional Design Consultant, TRU (Immunology). 2012-present
Teaching Technologist[1] (lab instructor/RAT3), UBC Dept. of Pathology. 2007-2012
Sessional Lecturer, UBC Dept. of Zoology. 2007
Curriculum Development Assistant[2], UBC BioSci Program (Bio 200). 2006
Graduate Teaching Assistant, UBC Dept. of Zoology. 1999-2005.
Graduate Teaching Assistant, UBC Dept of Microbiology and Immunology. 1992

Research Related:

Research Technician (RAT3) Michael Smith Labs. 1996-1999.
Graduate Student Research Assistant, UBC Biotechnology Laboratories 1992-1996
Research Technician (RAT3), UBC Dept. of Pathology. 1991

III. COURSES TAUGHT

As Lecturer and/or Staff Lab Instructor (Teacher Evaluations, Appendix 1):
(BCIT) BHSC 1023 Introduction to Microbiology (Lecturer)
(Columbia College) BIOL 120 Introduction to Biology (Lecture/Lab)
(Columbia College) BIOL 110 Introduction to Biology (Lecture/Lab)
(UBC) BIOL 335 Molecular Genetics (Lecturer)
(UBC) PATH 375 Introduction to Human Pathology (Lecturer)
(UBC) PATH 305 Introduction to Microscopy (Tutorial leader)
(UBC) PATH 303 Cytogenetics (Lecturer and Lab Instructor, author of lab manual)
(UBC) PATH 327 Medical Microbiology (Lab Instructor)
(UBC) PATH 301 Biochemistry (Lab Instructor- author of lab manual)
(UBC) PATH 300 Background to Medical Lab Science (Hematology section Lab Instructor)

As Graduate Student Teaching Assistant:
(UBC) BIOL 436 Integrated Functional Genomics (Lab)
(UBC) BIOL 335 Molecular Genetics (Tutorial)
(UBC) BIOL 334 Basic Genetics (Tutorial)
(UBC) BIOL 201 Biochemistry (Tutorial)
(UBC) BIOL 200 Cell Biology (Tutorial and Lab)
(UBC) BIOL 115 Introduction to Biology (Lab)

IV. RESEARCH AND BIOTECHNOLOGY PUBLICATIONS

Research Publications:

Doheny J. Greg, Mottus R., and Grigliatti T. (2008) Telomeric position effect--a third silencing mechanism in eukaryotes. **PLoS One.** 2008;3(12):e3864. Epub 2008 Dec 5.

Doheny J. Greg, Jervis E., Guarna M., Humphries R., Warren R, Kilburn D. (1999) Cellulose as an inert matrix for presenting cytokines to target cells: production and properties of a stem cell factor-cellulose-binding domain fusion protein. **Biochem J.** 1999 Apr 15;339 (Pt 2):429-34.

Jervis E., Guarna M., **Doheny J. Greg**, Haynes C., Kilburn G. (2005) Dynamic localization and persistent stimulation of factor-dependent cells by a stem cell factor / cellulose binding domain fusion protein. **Biotechnol Bioeng.** 2005 Aug 5;91(3):314-24.

Guarna M, Jervis E., **Doheny J. Greg**, Orchansky P, Warren R., Kilburn D. (1997) Stem cell factor immobilized onto cellulose induces persistent tyrosine phosphorylation of its receptor. **Cytokine** 1997 9 (11): 929

Biotechnology Patents (via U.B.C.):
Kilburn, D., Jervis, E., **Doheny, J. Greg**, and Haynes, C. (2000) Compositions and methods for modulating growth or differentiation of growth-factor dependent cells. **International Patent (WIPO) WO/2000/050570**

Kilburn, D., Humphries, K., **Doheny, J. Greg**, Jervis, E. and Alimonti, J. (1999) Compositions and methods for modulating cell proliferation using growth factor-polysaccharide binding fusion proteins. **United States Patent (USPTO) 5,874,308**

Kilburn, D., Humphries, K., **Doheny, J. Greg**, Jervis, E. and Alimonti, J. (1997) Compositions and methods for modulating cell proliferation using growth factor-polysaccharide binding fusion proteins. **Canadian Patent (CIPO) 2,243,300 (WIPO) WO/1997/026358**

Theses:
Doheny, J.G. 2008. A Study of the Composition and Function of Telomeric Chromatin in Drosophila melanogaster. (PhD Thesis, 227pp, UBC Library)

Doheny J.G. 1996. Construction and Characterization of a Chimerical Cytokine Which Binds to Cellulose: Fusion of a Bacterial Cellulose-Binding Domain to Steel Factor. (MSc Thesis, 114pp, UBC Library)

Contact References:
*Available on request.

V. TEACHING PHILOSOPHY

Overall Approach to Teaching:
In addition to my background in science I also have formal training in Learning Psychology. The former has given me a foundation in curriculum, and the latter a foundation in effective teaching methods. I am a strong believer in the use of evidence-based teaching methods, proven to be effective with controlled experiments.

I also believe in setting very high standards for student achievement, but not in a vacuum. Only after using the most effective teaching methods is the application of high achievement standards justified. An appropriate analogy would be the sink or swim method of teaching swimming. It works (at least for those who don't drown), and it makes the job of the swimming instructor easier; but it is a poor method for training champion swimmers. Better to teach students the most effective strokes, give them lots of practice, and then have a race to separate gifted swimmers from the average ones. In Education this means not only using the most effective methods to teach the curriculum,

but also teaching students **metacognitive study skills**. Something done in medical schools, but usually neglected in basic science programs.

Specific Teaching Methods:

Cognitive load theory, schema theory, and Piagetian developmental stage theory are three subjects borrowed from learning psychology that have served as a foundation for my teaching philosophy.

Cognitive Load Management (CLM; Clark et al., 2005) is a teaching method that aims to organize learning exercises around the limitations of the human working memory, keeping the number of concepts or variables that students must juggle at any given time to less than seven. The complexity of the individual variables can be increased through a process called "chunking," whereby related bits of information are combined into a single unit. CLM also attempts to optimize learning by maximizing the germane cognitive load (important information) and minimizing the extrinsic cognitive load (distracting information) associated with learning exercises, thus freeing up more attention and mental energy for the learning process. Ideally, learning exercises should be difficult, but elegant.

Schema theory proposes that students will learn new concepts more readily if they can link them to a pre-existing mental framework (a schema), which also serves to organize and store new information (Schunk 2011; Bruning et al., 2004). As an educational tool, schema theory attempts to A) design lessons to promote the development of well organized mental schemata, and B) activate pre-existing schemata prior to learning something new. This sometimes involves **teaching by analogy** or **metaphor**, and explaining abstract concepts using terms borrowed from popular culture and every day life.

Piagetian cognitive development models take into account the mental development stage of the student, conceding that not all students will have refined the ability to think or reason in the abstract by the time they reach university. So-called Piagetian programs attempt to develop this ability in students through guided progression. Piagetian exercises start with the activation of schemata prior to concrete, hands-on experimentation. Experimentation is then followed by a guided discussion and analysis of the results, followed by derivation of abstract principles. Going from the concrete to the abstract, rather than the abstract to the concrete is a hallmark of Piagetian programs.

Commitment to Evidence-Based Instructional Methods.
The learning models outlined above can be superimposed on to a number of different teaching methods, resulting in improved efficiency. However, I prefer to concentrate on those methods that have already been proven to be the most effective. My choice of teaching methods has been strongly influenced by the work of educator John Hattie (Hattie 2008), who conducted an exhaustive meta-analysis of different teaching methods and ranked them by **Effect Size** (d). Teaching methods with effect sizes of 0.40 or greater are considered superior.

Reciprocal teaching, and **peer tutoring** (or "near-peer" tutoring) are two such proven methods, with effect sizes of 0.74 and 0.55, respectively. I also support the **direct teaching of effective study methods** (d=0.59) including **study/rest intervals** (d=71), and the direct teaching of **metacognitive skills and activities** (d=69) such as summarizing, paraphrasing, elaborating, keeping learning journals etc. Many of these methods are already in use by medical schools that directed a great deal of effort into pedagogical research before chosing them.

I also support the use of **mastery learning** in certain situations. A method whereby students are given modules to complete, and may not proceed to the next module until they have mastered the previous one. Academic underachievers tend to benefit more from this method more than advanced learners (0.96 versus 0.58). I also support the use of **computer-assisted** and **blended learning,** but only under certain conditions. Computer-assisted learning is very effective when used by **cooperative pairs** (0.96), but can be counter productive when used in other ways. Finally, as mentioned above, I strongly support the use of **Piagetian programs** where possible, as they have been shown to have a great effect on learning (d=1.28).

Commitment to the Proper use of Problem Based Learning, Aided by Scaffolding and Schema Activation.
Problem based learning (PBL) is a popular teaching method that actually performs poorly when tested (d=0.15). This is most likely the result of improper use. Effective PBL must be preceded by proper schemata activation, and supported by a technique called "scaffolding," where the tutorial leader acts as a sort of mental crutch by helping to shape student discussions through appropriate questioning, pointing out assumptions that students are making, and drawing attention to holes in their logic. PBL does not perform well when used as an unorganized free-for-all.

Problem solving teaching, where expert heuristics are taught directly to students, and **worked examples** are two highly effective PBL-related teaching methods (0.71 and 0.57, respectively) that can be used as adjuncts to PBL. These methods train students to think like experts in a particular domain directly, rather than leaving them to develop expert reasoning in a sink of swim fashion. Finally, I strongly believe that PBL should be used for knowledge expansion and consolidation, rather than for knowledge acquisition. It should be the icing on the cake, not the cake itself. PBL should only be used once a foundation of basic knowledge has been established using other methods.

References:
Bruning, R.H. et al., Cognitive Psychology and Instruction (Prentice Hall 2004)
Clark, R.C. et al., Efficiency in Learning: Evidence-Based Guidelines to Manage Cognitive Load (Pfeiffer 2005)
Hattie, J. Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement (Routledge 2008)
Schunk, D.H. Learning Theories: an Educational Perspective (Addison Wesley 2011)

Additional information about my teaching philosophy and methods can be found on my science education Op/Ed blog (www.science20.com/profile/greg_doheny).

Appendix 1: Student-Teacher Evaluation Scores.

Original copies of student-teacher evaluations can be made available on request.

1. As Guest Lecturer (Pathology Department).

PATH 375 Introduction to (Human) Pathology

Position: **Lecturer (one of four)**   Date: 2010-2012   Times Taught: 2
Total Evaluations: 42 Registered Students: 60

Question	Average (max. 5)	% of Maximum
Clearly communicates learning objectives and expectations	4.86	**97%**
Communicates effectively	4.76	**95%**
Encourages students to engage with course material	4.83	**97%**
Overall, evaluation of student learning was fair	4.24	**85%**
Structure and clarity	4.64	**93%**
Teaching materials	4.79	**96%**
Demonstrates concern for students' learning	4.81	**96%**
Overall, the instructor was an effective teacher	4.79	**96%**

All Student Comments:
Positive (with caveats and suggestions)
- Dr. Doheny was an amazing instructor. Great pace, easy to understand, made sure everyone participated and made time for questions. Very approachable and easy to talk to.
- The multiple choice questions were awesome! Narrowed down how I should study when reviewing the material.
- Very good examples; pace was a bit quick at the end, but understandable due to large amount of material.
- Very clear explanations; good interactive activity.
- Good pace. Clear. Very approachable professor.
- I really liked the questions to test our understanding.
- Really good lecture. Interesting and engaged the students. Thanks.
- Very engaging and thoughtful lecture. Good notes and very thorough.
- Very interesting. Clear, concise and like the order/questions asked.
- Good presentation; everyone was very engaged and you made good use of examples.
- Very interesting and well presented lecture. Greg was very clear and had excellent audience participation.
- Liked this lecture very much. Not sure if genetics review was necessary.
- I liked how you included participation in your lecture. I think you could know more so that you could answer more of the students' questions. Though I understand that you don't need to know since it's beyond the scope of the course.
- Stay in our class. Excellent explanation of this topic.
- Very engaging: good lecture.
- Overall an effective instructor; clear and explains things well. Maybe speak a bit slower.
- Excellent notes, easy to follow, interesting lecture.
- Keep up the great work! Slow down a little please because need to generate info into brain.

- Very good at explaining.
- Really enjoyed the lecture.
- Great teaching. Yet, please slow down!
- Excellent!
- Maybe speak a little slower, but otherwise a very good instructor.

Negative

- A bit rushed in the end.

PATH 303 Cytogenetics, Tissue Culture and Cytology

Position: **Lecturer (one of two)**   Date: 2009-10   Times Taught: 3 in total (two different evaluation formats)   Total Evaluations: 16

Question	Average (max. 5)	% of Maximum
Clearly communicates learning objectives and expectations	4.94	**99%**
Communicates effectively	4.94	**99%**
Encourages students to engage with course material	4.81	**96%**
Overall, evaluation of student learning was fair	4.80	**96%**
Structure and clarity	4.88	**98%**
Teaching materials	4.75	**95%**
Demonstrates concern for students' learning	4.88	**98%**
Overall, the instructor was an effective teacher	4.88	**98%**

PATH 303 Cytogenetics, Tissue Culture and Cytlolgy

Position: **Lecturer (one of three)**   Date: 2008-9   Times Taught: 3 in total (second evaluation format)   Total Evaluations: 20

Question	Average (max. 7)	% of Maximum
Instructor is professional in manner	6.85	**98%**
Instructor is knowledgeable and analytical	6.85	**98%**
Instructor communicates effectively	6.70	**96%**
Instructor is clear and organized	6.75	**96%**
Instructor is enthusiastic and stimulating	6.75	**96%**
Instructor establishes rapport with the students	6.80	**97%**
Instructor actively involves students	6.85	**98%**
Instructor is available for consultation	6.85	**98%**
Instructor has provided clear instructional objectives	6.80	**97%**
Instructor has addressed the instructional objectives of the lectures	6.80	**97%**
Instructor's handout material is organized, understandable, useful and relevant to the lecture topic	6.75	**96%**
Instructor is an effective teacher	6.80	**97%**

All Student Comments (Cumulative):
Positive:

- Good examples; easy to understand.
- Awesome lectures.
- Awesome!
- The questions that you provide are very helpful for practicing for the exam and understanding the concepts.
- Good job.
- Very helpful to do in-class problems.

Negative:
- Talks a little fast.
- Speaks too quickly sometimes.

2. As Teaching Technician (Department of Pathology).

PATH 327 Medical Microbiology

Position: **Lab Instructor**   Date: 2009-10   Times Taught: 4 in total (2 different evaluation formats)   Total Evaluations: 16

Question	Average (max. 5)	% of max
Clearly communicates learning objectives and expectations	4.94	**99%**
Communicates effectively	4.88	**98%**
Encourages students to engage with the course	4.94	**99%**
Structure and clarity	4.94	**99%**
Teaching materials	4.75	**95%**
Demonstrates concern for students' learning	4.94	**99%**
Instructor returns marked work in a timely manner	4.80	**96%**
Instructor comments on students' reports were helpful	4.64	**93%**
Overall quality of teaching	4.94	**99%**

PATH 327 Medical Microbiology

Position: **Lab Instructor**   Date: 2007-9   Times Taught: 4 in total (second evaluation format)   Total Evaluations 41

Question	Average (max. 7)	% of max
Instructor is professional in manner	6.83	**98%**
Instructor is knowledgeable about the subject area	6.80	**97%**
Instructor communicates effectively	6.78	**97%**
Instructor is organized and clearly explains laboratory procedures and objectives	6.68	**95%**
Instructor is enthusiastic and stimulating	6.87	**98%**
Instructor shows respect and interest in students	6.90	**99%**
Instructor actively involves students	6.90	**99%**
Instructor is available for consultation	6.95	**99%**
Instructor returns marked lab reports in a timely manner	6.82	**97%**
Instructor comments on students' lab reports were helpful	6.61	**94%**
Instructor is an effective teacher	6.85	**98%**

All student comments (Cumulative):

Positive:
- Knowledgeable and friendly.
- Lab session was fun and informative. Thank you.
- Very helpful and considerate.
- Excellent job. However, I felt that you tended to explain the entire experiment in completion instead of us actually carrying out the experiment. I would prefer to have less pre-lab instruction.
- Your explanations clear up everything, better than the manual.

Negative:
- Lab manual at times confusing; typos. (note, I didn't write this particular manual.)

PATH 301 Basic and Physical Biochemistry

Position: **Lab Instructor**   Date: 2009-10   Times Taught: 4 in total (2 different evaluation formats)   Total Evaluations: 14

Question	Average (max. 5)	% of max
Clearly communicates learning objectives and expectations	4.94	**99%**
Communicates effectively	4.88	**98%**
Encourages students to engage with the course	4.94	**99%**
Structure and clarity	4.94	**99%**
Teaching materials	4.75	**95%**
Demonstrates concern for students' learning	4.94	**99%**
Instructor returns marked work in a timely manner	4.80	**96%**
Instructor comments on students' reports were helpful	4.64	**93%**
Overall quality of teaching	4.94	**99%**

PATH 301 Basic and Physical Biochemistry

Position: **Lab Instructor**   Date: 2007-9   Times Taught: 4 in total (second evaluation format)   Total Evaluations 39

Question	Average (max. 7)	% of max
Instructor is professional in manner	6.90	**99%**
Instructor is knowledgeable about the subject area	6.85	**98%**
Instructor communicates effectively	6.69	**96%**
Instructor is organized and clearly explains laboratory procedures and objectives	6.69	**96%**
Instructor is enthusiastic and stimulating	6.77	**97%**
Instructor shows respect and interest in students	6.87	**98%**
Instructor actively involves students	6.87	**98%**
Instructor is available for consultation	6.92	**99%**
Instructor returns marked lab reports in a timely manner	6.77	**97%**
Instructor comments on students' lab reports were helpful	6.74	**96%**
Instructor is an effective teacher	6.77	**97%**

All student comments (Cumulative):
Positive:
- Very helpful! Explains and introduces the lab well. Allows students to brainstorm why the lab is being done and what is the purpose of each step. Thanks for all your help!
- Very intelligent and friendly.
- Great "professor in training."
- Always helpful and very informative.
- Very helpful! Explains concepts very well.
- Great teacher.
- Having the order of the labs as VNTR lab first then cloning lab is ok. Moving the deadline for the VNTR helped a lot since we had exams around the time of the original deadline.
- Enjoyable labs.

Negative:
- Sometimes gets sidetracked and talks about other techniques not pertaining to current lab.
- The briefing part was somewhat confusing at times.
- The lab reports were very long and some of the questions were very obscure. Also, I felt some of the labs were quite long. (Note: I had not re-written the lab manual when this comment was made (2008-9). I agreed with the comment, asked for, and was given permission to re-write the lab manual. I will make it available on request.)

PATH 300 Background to Medical Laboratory Science

Position: **Lab Instructor**   Date: 2007-10 Times Taught: 4 in total
Total Evaluations 29

Question	Average (max. 7)	% of max
Instructor is professional in manner	6.90	**99%**
Instructor is knowledgeable about the subject area	6.86	**98%**
Instructor communicates effectively	6.79	**97%**
Instructor is organized and clearly explains laboratory procedures and objectives	6.82	**97%**
Instructor is enthusiastic and stimulating	6.79	**97%**
Instructor shows respect and interest in students	6.97	**99%**
Instructor actively involves students	6.86	**98%**
Instructor is available for consultation	6.90	**99%**
Instructor returns marked lab reports in a timely manner	6.68	**95%**
Instructor comments on students' lab reports were helpful	6.83	**98%**
Instructor is an effective teacher	6.83	**98%**

All student comments (Cumulative):
Positive:
- A very good instructor with many good stories.
- Very approachable. Always answers our questions.
- Very evvective teacher. Explains concepts well. Very helpful.
- Great teacher, one of my favorites. Greg is great.
- Great!

Negative:

- Marking on lab reports may have been kind of light, nice to students but not helpful for motivating students to put much effort into them.

3. As Sessional Lecturer (Department of Zoology).

BIOL 335 Molecular Genetics
Position: **Lecturer** (1 of 3)   Date: 2007   Number of Times Taught: 1 (as lecturer, once as teaching assistant)   Total Evaluations: 148

Question	Average (max 5)	% of max
Presented material in a clear and understandable way	3.51	**70%**
Presented material in an interesting manner	3.73	**75%**
Was receptive to questions	4.38	**86%**
Stimulated students to think	4.03	**81%**
Was considerate of students	4.23	**85%**
Taught effectively	3.49	**70%**
AVERAGE	**3.89**	**78%**

4. As Teaching Assistant (Departments of Zoology/Botany).

BIOL 436 Integrated Functional Genomics
Position: **Teaching Assistant** Total Evaluations: 20

Question	Average (max 5)	% of max
Well Prepared	4.70	**94%**
Helpful	4.74	**95%**
Considerate of students	4.64	**93%**
Easily understood	4.65	**93%**
An effective instructor	4.55	**91%**

BIOL 335 Molecular Genetics
Position: **Teaching Assistant** Total Evaluations: 20

Question	Average (max 5)	% of max
Well Prepared	4.60	**92%**
Helpful	4.70	**94%**
Considerate of students	4.65	**93%**
Easily understood	4.40	**88%**
An effective instructor	4.40	**88%**

BIOL 334 Basic Genetics
Position: **Teaching Assistant** Total Evaluations: **189**

Question	Average (max 5)	% of max
Well Prepared	4.70	**94%**
Helpful	4.62	**92%**
Considerate of students	4.70	**94%**
Easily understood	4.48	**89%**
An effective instructor	4.54	**90%**

BIOL 201 Introduction to Biochemistry

Positions: **Teaching Assistant**   Total Evaluations: 38

Question	Average (max 5)	% of max
Well Prepared	4.34	**89%**
Helpful	4.03	**81%**
Considerate of students	4.05	**81%**
Easily understood	3.95	**79%**
An effective instructor	4.00	**80%**

BIOL 200 Introduction to Cell Biology (Tutorial Version)

Position: **Teaching Assistant** Total Evaluations: 66

Question	Average (max 5)	% of max
Well Prepared	4.58	**92%**
Helpful	4.24	**85%**
Considerate of students	4.39	**88%**
Easily understood	4.23	**85%**
An effective instructor	4.25	**85%**

BIOL 200 Introduction to Cell Biology (Laboratory Version)

Position: **Teaching Assistant** Total Evaluations: 43

Question	Average (max 5)	% of max
Well Prepared	4.53	**91%**
Helpful	4.52	**91%**
Considerate of students	4.28	**86%**
Easily understood	4.16	**83%**
An effective instructor	4.32	**86%**

BIOL 115 Introduction to Biology Laboratory

Position: **Teaching Assistant** Total Evaluations: 41

Question	Average (max 5)	% of max
Well Prepared	4.37	**87%**
Helpful	4.24	**85%**
Considerate of students	4.43	**89%**
Easily understood	4.00	**80%**
An effective instructor	4.18	**84%**

Appendix 2: List of Sample Teaching Materials.

The following is a list of examples of teaching materials I have authored for various courses which can be made available on request in PDF format.

1. (UBC) **PATH 301 Biochemistry: Laboratory Manual.** 199pp. 11.7 MB PDF
2. (BCIT) **BHSC 1023 Microbiology: Course Notes.** 169pp. 1.7 MB PDF
3. (UBC) **PATH 303 Cytogenetics: Final Exam.** 12pp. 288 KB PDF
4. (UBC) **PATH 301 Biochemistry: Bioinformatics take home assignment.** 11pp. 498 KB PDF
5. (UBC) **PATH 375 Introduction to Pathology: PowerPoint lecture presentation on human pathology and genetic diseases.** 110 Slides/ 3 hour lecture. 3.2 MB PDF

Appendix 3: Additional Training and Certifications.

Conference Presentations:
P.E.N.C.E. Conference, Whistler B.C. 1994.

Additional Training:
Chemical Safety Certificate (UBC; active)
Biosafety Certificate (UBC; active)
Radiation Safety Certificate (expired)
WebCT workshops I & II, T.A.G. 2010
TLEF Grant Writing Workshop, T.A.G. 2010
Moodle and Blackboard classroom management systems.
Trained as Pathology Dept. ergonomics representative for Department of HSE. 2008
Thunderbird Residence Advisor conflict resolution workshops. 2003
Zoology Department T.A. teaching workshops.1999, 2000.
International House multicultural sensitivity training workshops (I-House peer volunteer). 1993