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**CURRENT POSITION**

Laboratory Manager & Research Associate, Human Biology Research Laboratory,  
Dept. of Anthropology, University of Oregon

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**EDUCATION**

- 1998 -2003      Doctoral degree (Ph.D.) in Biochemistry  
Department of Molecular and Cell Biology, University of Cape  
Town, South Africa.
- 1997             Honors degree in Medical Biochemistry (Hons.)  
Department of Chemical Pathology, University of Cape Town  
Medical School. Awarded with distinction.
- 1994-1996      Bachelor of Science degree (B.Sc.)  
University of Cape Town, majoring in Biochemistry and  
Microbiology; degree awarded with distinction
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**POSITIONS HELD**

- 2014 -          Laboratory Manager & Research Associate, Human Biology Research  
Lab  
Department of Anthropology, University of Oregon, Eugene, OR, USA
- 2007 - 2014    Postdoctoral Associate in Prof Joe Thornton's group  
IE<sup>2</sup>, University of Oregon, Eugene, OR, USA
- 2005-2006     Postdoctoral Associate in Dr Irvin Modlin's group  
Gastric Pathobiology Group, Department of Surgery, Yale Medical  
School, New Haven, CT, USA

- 2003-2004 Claude Harris Leon Foundation Post-Doctoral Fellow  
Department of Botany and Zoology, University of Stellenbosch, Cape  
Town, South Africa
- 2001-2002 Research Assistant to Dr Robin Adair  
Plant Protection Institute, University of Stellenbosch
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**RESEARCH FELLOWSHIPS**

- 2003 Competitive Freestanding National Research Foundation of South  
Africa Overseas Postdoctoral Fellowship (declined)  
University of Oregon, USA
- 2003-2004 Claude Harris Leon Postdoctoral Fellowship  
University of Stellenbosch, South Africa
- 2003 National Research Foundation Prestigious Fellowship for Postdoctoral  
Research  
University of Stellenbosch, South Africa
- 2000-2001 University of Cape Town Research Associateship for Research  
Excellence at the Doctorate Level  
University of Cape Town, South Africa
- 2000-2001 National Research Foundation Scholarship for Doctoral Research  
University of Cape Town, South Africa
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**AWARDS AND HONORS**

- 2003 Best Speaker Prize  
Experimental Biology Group of South Africa
- 1998 Boehringer-Mannheim Prize for the Best Biochemistry Honors  
Student in South Africa
- 1998 Manuel & Luby Washkansky Scholarship for Outstanding Academic  
Achievement
- 1998-1999 Prestigious Master's Bursary  
National Research Foundation of South Africa
- 1997 Prestigious Honor's Bursary  
National Research Foundation of South Africa

- 1997 Top Student in the Medical Biochemistry Honors Class of 1997  
University of Cape Town
- 1996 David Pitman Scholarship for Most Outstanding Graduate Student  
Completing a Bachelor's Degree  
University of Cape Town
- 1994-1996 Aubrey Radford Prestigious Entrance Scholarship  
University of Cape Town
- 1994-1996 Deans Merit List for Outstanding Academic Achievement  
University of Cape Town
- 1995-1996 Undergraduate Merit Scholarship  
National Research Foundation of South Africa
- 1994 Entrance Merit Scholarship  
University of Cape Town

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## PUBLICATIONS IN PEER-REVIEWED JOURNALS

### Human Biology & Health

1. **Eick G**, Urlacher SA, McDade T, Kowal P, Snodgrass JJ. Validation of an optimized ELISA for quantitative assessment of Epstein-Barr virus antibodies from dried blood spots. *Accepted Biodemography & Social Biology*, 2016
2. Arokiasamy P, Uttamacharya, Kowal P, Gildner TE, Thiele E, Capistrant BD, Biritwum RB, Yawson AE, Mensah GP, Maximova T, Wu F, Guo Y, Zheng Y, Kalula S, Salinas Rodriguez A, Manrique Espinoza B, Liebert MA, **Eick G**, Sterner KN, Barrett T, Duedu K, Gonzalez E<sup>1</sup>, Ng N, Negin J, Jiang Y, Byles JE, Madurai S, Minicuci N, Snodgrass JJ, Naidoo N, Chatterji S. Chronic non-communicable diseases in six low- and middle-income countries: an investigation of the Study on global AGEing and adult health. *Accepted American Journal of Epidemiology*, 2016

### Molecular Biology & Evolution (\*Joint first authors)

1. Hudson WH, Kossmann BR, de Vera IM, Chuo SW, Weikum ER, **Eick GN**, Thornton JW, Ivanov IN, Kojetin DJ, Ortlund EA. Distal substitutions drive divergent DNA specificity among paralogous transcription factors through subdivision of conformational space. 2016. PNAS 113(2):326-31

2. Pio DV, Engler R, Linder PH, Monadjem A, Cotterill FPD, Taylor PJ, Schoeman CS, Price BW, Villet MH, **Eick G**, Salamin N, Guisan A. Effects of climate change on animal and plant phylogenetic diversity in Southern Africa. *Global Change Biology*. *Global Change Biology* 2014; 20(5): 1538-1549
3. Harms MJ\*, **Eick GN\***, Goswami D, Colucci JK, Griffin PR, Ortlund EA, and Thornton JW. Biophysical mechanisms for large-effect mutations in the evolution of steroid hormone receptors. *Proceedings of the National Academy of Sciences USA* 2013; 110(28):11475-11480
4. **Eick GN**, Colucci JK, Harms MJ, Ortlund EA, Thornton JW. Evolution of minimal specificity and promiscuity in steroid hormone receptors. *PLoS Genetics* 2012; Nov;8(11):e1003072
5. Volleth, M, **Eick, G**. Chromosomal evolution in bats as revealed by FISH: The on-going search for the ancestral chiropteran karyotype. *Cytogenetic and Genome Research* 2012; 137: 165-173
6. **Eick GN**, Thornton JW. Evolution of steroid receptors from an estrogen-sensitive ancestral receptor. *Mol Cell Endocrinol* 2011; 334 (1-2): 31-8
7. Bridgham JT, **Eick GN**, Larroux C, Deshpande K, Harms MJ, Gauthier ME, Ortlund EA, Degnan BM, Thornton JW. Protein evolution by molecular tinkering: diversification of the nuclear receptor superfamily from a ligand-dependent ancestor. *PLOS Biology* 2010; 8(10)
8. Kolesik P, Adair RJ, **Eick G**. Six new species of *Asphondylia* (Diptera: Cecidomyiidae) damaging flower buds and fruit of Australian *Acacia* (Mimosaceae). *Systematic Entomology* 2010;35:250-267
9. **Eick GN**, Jacobs DS, Yang F, Volleth M. Karyotypic differences in two sibling species of *Scotophilus* from South Africa (Vespertilionidae, Chiroptera, Mammalia). *Cytogenetic and Genome Research* 2007;118(1):72-7
10. Matthee CA, **Eick GN**, Williams-Munroe S, Montgelard C, Pardini A, Robinson TJ. Indel evolution of mammalian introns and the utility of non-coding nuclear markers in eutherian phylogenetics. *Molecular Phylogenetics and Evolution* 2007; 42(3):827-37
11. **Eick GN**, Jacobs DS, Matthee CA. A nuclear DNA phylogenetic perspective on the evolution of echolocation and historical biogeography of extant bats (Chiroptera). *Mol Biol Evol* 2005;22(9):1869-86
12. Jacobs DS, **Eick GN**, Schoeman MC, Matthee CA. Cryptic species in an insectivorous bat, *Scotophilus dinganii*. *Journal of Mammalogy* 2006;87(1):161-170
13. Kolesik P, Adair RJ, **Eick G**. Nine new species of *Dasineura* (Diptera: Cecidomyiidae) from flowers of Australian *Acacia* (Mimosaceae). *Systematic Entomology* 2005;30:454-479
14. Miller-Butterworth CM\*, **Eick G\***, Jacobs DS, Schoeman MC, Harley EH. Genetic and phenotypic differences between Natal-and lesser long-fingered bats and a global miniopterine phylogeny. *Journal of Mammalogy* 2005;86(6):1121-1135
15. Jacobs DS, **Eick GN**, Richardson EJ, Taylor PJ. Genetic similarity amongst phenotypically diverse little free-tailed bats, *Chaerephon pumilus*. *Acta Chiropterologica* 2004;6(1):13-21

16. **Eick BN**, Harley EH, Cherry MI. Molecular analysis supports specific status for *Bufo pardalis* and *B. pantherinus*. Journal of Herpetology 2001;35(1):113-114

### Cancer Research

1. Kidd M, Modlin IM, Pfragner R, **Eick GN**, Champaneria M, Chan AK, Camp RL and Mane SM. Small bowel carcinoid (enterochromaffin cell) neoplasia exhibits transforming growth factor-beta1-mediated regulatory abnormalities including up-regulation of C-Myc and MTA1. Cancer 2007;109(12):2420-31 Kidd M, Nadler, B, Mane SM,
2. **Eick GN**, Malfertheiner MV, Champaneria MC, Pfragner R, Modlin IM GeneChip, geNorm and Gastrointestinal tumors: novel reference genes for real-time PCR. Physiol Genomics 2007 ;30(3):363-70
3. Kidd M, **Eick GN**, Modlin IM, Pfragner R, Champaneria MC, Murren J. Further delineation of the continuous human neoplastic enterochromaffin (EC) cell line, KRJ-I, and the inhibitory effects of Lanreotide and Rapamycin. Journal of Molecular Endocrinology 2007; 38(1) 181-192
4. Kidd M, Modlin IM, Mane SM, Camp RL, **Eick GN**, Latich I, et al. Utility of molecular genetic signatures in the delineation of gastric neoplasia. Cancer 2006;106(7):1480-8
5. Modlin IM, Latich I, Kidd M, Zikusoka M, **Eick G**. Therapeutic options for gastrointestinal carcinoids. Clin Gastroenterol Hepatol 2006;4(5):526-47 Kidd M, Modlin IM, Mane SM, Camp RL, **Eick G**, Latich I. The role of genetic markers-NAP1L1, MAGE-D2, and MTA1 in defining small-intestinal carcinoid neoplasia. Ann Surg Oncol 2006;13(2):253-62
6. Kidd M, Modlin IM, **Eick GN**, Champaneria MC. Isolation, Functional Characterization and Transcriptome of Mastomys Ileal Enterochromaffin Cells. Am J Physiol Gastrointest Liver Physiol 2006 ;291(5):G778-91
7. Modlin IM, Kidd M, Latich I, Zikusoka MN, **Eick GN**, Mane SM, et al. Genetic Differentiation of Appendiceal Tumor Malignancy: A Guide for the Perplexed. Ann Surg 2006;244(1):52-60
8. Modlin I, Latic I, MN Z, Kidd M, **Eick GN**, Chan A. Gastrointestinal carcinoids: the evolution of diagnostic strategies. Journal of Clinical Gastroenterology 2006; 40(7):572-82
9. Modlin IM, Kidd M, Pfragner R, **Eick GN**, Champaneria MC. The functional characterization of normal and neoplastic human enterochromaffin cells. J Clin Endocrinol Metab 2006;91(6):2340-8
10. Zikusoka MN, Kidd M, **Eick G**, Latich I, Modlin IM. The molecular genetics of gastroenteropancreatic neuroendocrine tumors. Cancer 2005;104(11):2292-309
11. Kidd M, **Eick G**, Shapiro MD, Camp RL, Mane SM, Modlin IM. Microsatellite instability and gene mutations in transforming growth factor-beta type II receptor are absent in small bowel carcinoid tumors. Cancer 2005;103(2):229-36

12. Kidd M, Hinoue T, **Eick G**, Lye KD, Mane SM, Wen Y, et al. Global expression analysis of ECL cells in *Mastomys natalensis* gastric mucosa identifies alterations in the AP-1 pathway induced by gastrin-mediated transformation. *Physiol Genomics* 2004;20(1):131-42

### History of Medicine

1. Modlin IM, Kidd M, Shapiro MD, **Eick G**. Oberndorfer and the evolution of carcinoid disease. *Archives of Surgery* 2007 ;142(2):187-97
2. Champaneria, M. C., I. M. Modlin, M. Kidd, and **G. N. Eick**. Friedrich Feyrter: A Precise Intellect in a Diffuse System. *Neuroendocrinology* 2006; 83(5-6):394-404

### Book Chapters

1. Modlin IM, Champaneria MC, Chan A, Kidd M, **Eick G**. The history of the pancreas in "The Pancreas (2nd edition)" Beger HW, Buchler MW (eds) Blackwell (2008)
2. Modlin IM, Kidd M, **Eick G**, Latich I, Zikusoka MN. Gastric Carcinoid and the ECL cell in "From Gastrin to GERD – A Century of Acid Suppression", Felsenstein CCCP, Hanover 2006; 68-81
3. Modlin IM, Kidd M, **Eick G**, Latich I, Zikusoka MN. Edkins and a Century of Gastrin in "From Gastrin to GERD – A Century of Acid Suppression", Felsenstein CCCP, Hanover 2006; XXXII-XLVI
4. Modlin IM, Zikusoka MN, Kidd M, Latich I, **Eick G**, Romanyshyn JC. The History and Epidemiology of Neuroendocrine Tumors in "Handbook of Neuroendocrine Tumors", Caplin M and Kvols L (eds), BioScientifica, London 2006

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## PRESENTATIONS AT MEETINGS AND CONFERENCES

### Talks

- 2016 "Validation of a commercially-available ELISA for apolipoprotein B measurement in dried blood spots"  
Biomarker Network Meeting, Washington DC, USA
- 2015 "What a dried blood spot can(t) do: Methodological challenges associated with incorporating dried blood spot markers into population-based research"  
Biomarker Network Meeting, San Diego, CA, USA
- 2010 "The Evolution of minimal specificity in steroid receptors"  
Evolution Meeting, Portland OR, USA

- 2004 “The evolution of echolocation in bats: a phylogenetic perspective based on nuclear intron sequences”  
Joint Royal Society of South Africa and Claude Harris Leon Seminar, Cape Town, South Africa
- 2004 “A nuclear DNA phylogenetic perspective on the evolution of echolocation and historical biogeography of extant bats (Chiroptera)”  
Plenary Session, 13<sup>th</sup> International Bat Research Conference, Poland
- 2003 “Bats, molecules and the evolution of echolocation”  
Department of Molecular and Cell Biology, University of Cape Town, South Africa
- 2003 “Fine-scale genetic structure of the endemic black sugar ant *Camponotus klugii*”  
Experimental Biology Group of South Africa, Cape Town, South Africa
- 1998 “Molecular diversity in an endangered toad species, *Bufo pardalis*”  
Fifth Symposium of the Herpetological Association of Africa, Stellenbosch, South Africa

### Posters

- 2016 “What a drop can really do: Methodological Challenges of Integrating Dried Blood Spot Samples into Human Biology Research”  
Human Biology Association meeting, Atlanta, GA, USA
- 2013 “Functional Robustness of Reconstructed Ancestral Sequences”  
Society for Molecular Biology & Evolution, Chicago, IL, USA
- 2012 “Evolution of androgen-sensitivity in the steroid receptor family”  
IGERT Symposium: The future of Evo-Devo, Portland, OR, USA
- 2011 “Evolution of novel receptor-ligand interactions in the steroid receptor family: An ancient tale of specificity & promiscuity”  
Keystone Symposium on Evolutionary Developmental Biology, Granlibakken, CA, USA
- 2009 “Evolution of 3-ketosteroid recognition in steroid hormone receptor family: An ancestral perspective”  
Evolution: The Molecular Landscape, LXXIV Cold Spring Harbor Symposium on Quantitative Biology, Cold Spring Harbor, NY, USA

- 2007 “Resurrecting the ancient 3-ketosteroid receptor: insights into the evolutionary dynamics of steroid hormone receptor evolution”  
Gordon Conference on Ecological and Evolutionary Functional Genomics, RI, USA
- 2006 “Gastrointestinal carcinoid tumors: a problem of increased magnitude and diminished support”  
Digestive Disease Week, Los Angeles, CA, USA
- 2006 “Characterization of a human neoplastic enterochromaffin (EC) cell line, KRJ-1 and the anti-proliferative effects of Lanreotide and Rapamycin”  
Digestive Disease Week, Los Angeles, CA, USA
- 2006 “Gastrin-Induced CCN2/CTGF over-expression in *Mastomys* gastric carcinoid may be the basis of ECL transformation and gastrin autonomy”  
Digestive Disease Week, Los Angeles, CA, USA
- 2006 “Functional Characterization and Transcriptome analysis of *Mastomys* Enterochromaffin Cells”  
Digestive Disease Week, Los Angeles, CA, USA,
- 2006 “The Transcriptome and function of Normal and Neoplastic Human EC Cells”  
Digestive Disease Week, Los Angeles, CA, USA
- 2006 “Genetic and phenotypic differences between the Long-fingered bats, *Miniopterus natalensis* and *M. fraterculus*”  
Society for Molecular Biology and Evolution, AZ, USA
- 2002 “DNA-based identification of seed-preventing gall midges (Diptera: Cecidomyiidae) from Australian Acacia”  
Third International Symposium on the Biology of Gall-Inducing Arthropods, Stellenbosch, South Africa
- 2002 “A molecular phylogeny of southern African *Camponotus*”  
3<sup>rd</sup> Congress of the South Africa Society for Systematic Biology, Grahamstown, South Africa
- 1999 “Fine-scale genetic structure of the endemic black sugar ant *Camponotus klugii*”  
Fifth International DNA Fingerprinting Conference, Port Elizabeth, South Africa
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## EXAMINATION COMMITTEES

- 2007 External Reviewer of the Master's Thesis of Ms. Natasha Muna,  
University of Cape Town
- 2013 External Reviewer of the Master's Thesis of Ms. Melanie Napier,  
University of KwaZulu-Matal
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## REVIEWING SERVICES

## Research Agencies

- ▶ National Research Foundation of South Africa

## International Scientific Journals

- ▶ Acta Chiropterologica
  - ▶ BMC Evolutionary Biology
  - ▶ International Journal of Biodiversity and Conservation
  - ▶ Journal of Mammalogy
  - ▶ Molecular Ecology
  - ▶ Molecular Reproduction and Development
  - ▶ Naturwissenschaften
- 

## STUDENT SUPERVISION

- ▶ Noah Simons, Department of Anthropology PhD candidate, University of Oregon, 2015 - present
- ▶ Elisabeth Goldman, Department of Anthropology Master's candidate, University of Oregon, 2014-2016
- ▶ Tyler Fording, Department of Anthropology Undergraduate, University of Oregon, 2014-2016
- ▶ Devan Compton, Department of Anthropology Undergraduate, University of Oregon, 2014-2015
- ▶ Luke Wheeler, Institute of Molecular Biology Graduate Student, University of Oregon, 2013
- ▶ Philip Gonzalez, Institute of Molecular Biology Graduate Student, University of Oregon, 2011
- ▶ Alexandria Taber, Chemistry Graduate Student, University of Oregon, 2010

- ▶ Ann Womack, Biology Graduate Student, University of Oregon, 2010
  - ▶ Paul Cziko, Biology Graduate Student, University of Oregon, 2007
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## TRAINING EXPERIENCE

- ▶ Assisted in training a team of undergraduate students how to collect dried blood spots and perform on-site fingerprick blood glucose and lipid measurements for the Huerto de la Familia Health Fair in Eugene, OR in 2015 & 2016
  - ▶ Trained 15 team leaders in Tunisia (Feb 2016) in the use of fingerprick blood collection methods and use of point-of-care devices to measure lipids, glucose, glycated hemoglobin, and hemoglobin levels for a large WHO-funded population study that was initiated in Feb 2016 in Tunisia.
  - ▶ Spent a week by invitation in the Department of Anthropology, Yale University in May 2015 training advanced graduate students how to run DBS-based ELISA assays.
  - ▶ Trained a team of 20 graduate and undergraduate students in biological sample collection techniques for the 'Eugene200' collection drive in 2014-2015
  - ▶ Mentored four final year Yale medical students in the laboratory research component of their degree 2005, 2006
  - ▶ Organizer and demonstrator for School Teachers' Biology Practical Training Course 2000, 2001, University of Cape Town, South Africa
  - ▶ Demonstrator for the Introductory Course to Zoology for first year B.Sc. students at the University of Cape Town 1998, 1999
  - ▶ Demonstrator and tutor for second and third year Biochemistry students, University of Cape Town, South Africa, 1998, 1999, 2000, 2001, 2002
  - ▶ Assisted with the laboratory training in molecular techniques for the Zoology Honors and Conservation Biology Masters Course, University of Cape Town 1998, 1999, 2000, 2001
-