BIOGRAPHICAL SKETCH

NAME	POSITION TITLE
Elizabeth Anne Illingworth	Associate Professor

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.*)

INSTITUTION AND LOCATION	DEGREE (*if applicable*)	YEAR(s)	FIELD OF STUDY
University College of North Wales, Bangor, UK	B.Sc	1980	Applied Zoology
University of London, UK	Ph.D	1991	Experimental Pathology
Dept. Biochemistry and Molecular Genetics, St. Mary's Hospital Medical School, London, UK	Post-doc	1991-1992	Molecular biology, molecular cytogenetics and digital microscopy

A. POSITIONS AND HONORS

1992 - 1999	Research Associate: Department of Molecular & Human Genetics, Baylor College of Medicine, Houston, Texas.
1999 - 2001	Instructor: Department of Pediatrics (Cardiology), Baylor College of Medicine.
2001 - 2006	Assistant Professor: Department of Pediatrics (Cardiology), Baylor College of Medicine,
2006 - 2010	Adjunct Associate Professor, IBT, TAMHSC, Houston, Texas
2006 - 2010	Associate Telethon Scientist, Dulbecco Telethon Institute, c/o TIGEM, Naples, Italy
2007 - present	Associate Professor, University of Salerno, Dept. Chemistry and Biology, Via Giovanni Paolo II, 132, 84084 Fisciano, Italy

AD HOC REVIEWER
Reviewer for the following Journals: *Circulation, Circulation Research, American Journal of Medical Genetics, Developmental dynamics, Human Genetics, Developmental Cell, PloS One,*
Reviewer for the following organizations: NIH, Wellcome Trust, UK, Thrasher Foundation, American Heart Association.

RESEARCH INTERESTS
Pathogenesis of 22q11.2 deletion syndrome. The role of *Tbx1* in brain and vascular development.

B. SELECTED PEER REVIEWED PUBLICATIONS:
Please note: **Elizabeth Illingworth** and **Elizabeth Lindsay** are the same person.
https://scholar.google.it/citations?user=FnDZaFkAAAAJ&hl=en, H-index 38, citations 6189 (April 2018)

68) Gentile MT, Russo R, Pastorino O, Cioffi S, Barbieri F, **Illingworth EA**, Grieco M, Chambery A, Colucci-D'Amato L. Ruta graveolens water extract inhibits cell-cell network formation in human umbilical endothelial cells via MEK-ERK1/2 pathway. Exp Cell Res. 364:50-58 (2018).
67) Baldini A, Fulcoli FG, **Illingworth E**. Tbx1: Transcriptional and Developmental Functions. *Current Topics in Developmental Biology* 122:223-243 (2017).
(66) Cortical development requires mesodermal expression of Tbx1, a gene haploinsufficient in 22q11.2 deletion syndrome. Flore, G., Cioffi, S., Bilio, M., **Illingworth, E**. *Cerbral Cortex* 27(3):2210-2225 (2017).
(65) Gradient COUP-TFI expression is required for functional organization of the hippocampal septo-temporal longitudinal axis. Flore, G., Di Roberto, G., Parisot, J., Sannino, S., Russo, F., **Illingworth, E**., Studer, M., De Leonibus, E. *Cerbral Cortex* 27(2):1629-1643 (2017).
(64) Cioffi S, Martucciello S, Fulcoli FG, Bilio M, Ferrentino R, Nusco E, **Illingworth E**. *Tbx1* regulates brain vascularization *Human Molecular Genetics*. Epub 2013 Aug 14, 23:78-89 (2014).

(63) Toritsuka M, Kimoto S, Muraki K, Landek-Salgado M, Yoshida A, Yamamoto N, Horiuchi Y, Hiyama H, Tajinda K, Keni N, **Illingworth E**, Iwamoto T, Kishimoto T, Sawa A, Tanigaki K. Deficits in microRNA-mediated Cxcr4/Cxcl12 signaling in neurodevelopmental deficits in a 22q11-deletion syndrome mouse model. *PNAS*, 110:17552-7 (2013)

(62) R De Cegli, S Iacobacci, G Flore, G Gambardella, L Mao, L Cutillo, M Lauria, J Klose, **E Illingworth,** S Banfi, D di Bernardo. Reverse engineering a mouse embryonic stem cell-specific transcriptional network reveals a new modulator of neuronal differentiation. *Nucleic Acids Research*. 41:711-726 (2012)

(61) S Kimoto, K Muraki, M Toritsuka, S Mugikura, K Kajiwara, T Kishimoto, **E Illingworth**, K Tanigaki. Selective overexpression of Comt in prefrontal cortex rescues schizophrenia-like phenotypes in a mouse model of 22q11 deletion syndrome. *Translational Psychiatry*. 2:e146, Pag.1-16 (2012).

(60) L. Chen, G. Fulcoli, R. Ferrentino, S. Martucciello, **E. A. Illingworth**, A. Baldini. Transcriptional Control in Cardiac Progenitors: Tbx1 interacts with the BAF chromatin remodeling complex and regulates Wnt5a. *PLoS Genetics*, 8(3): e1002571, p. 1-17 (2012) IF 8.5

(59) Earls L, Bayazitov I, Fricke R, Berry R, **Illingworth E**, Mittleman G, Zakharenko S. Dysregulation of presynaptic calcium and synaptic plasticity in a mouse model of 22q11 deletion syndrome. *J. Neuroscience*. 30:15843-15855 (2010). IF 7.8

(58) Chen L, Mupo A, Huynh T, Cioffi S, Woods M, Jin C, McKeehan W, Thompson-Snipes L, Baldini A, **Illingworth E**. *Tbx1* regulates *Vegfr3* and is required for lymphatic vessel development. *Journal of Cell Biology*, 189:417-424 (2010). IF 9.6

(57) Randall V, McCue K, Roberts C, Kyriakopoulou V, Beddow S, Vitelli F, Prescott K, Shaw-Smith C, Devriendt K, Bosman E, Steffes G, Steel K, Simrick S, Basson A, **Illingworth E**, Scambler S. Great vessel development requires bi-allelic expression of *Chd7* and *Tbx1* in pharyngeal ectoderm. *Journal Clinical Investigation*, 119: 3301-3310 (2009). IF 15.4

(56) Calmont A, Ivins S, Van Bueren KL, Papangeli I, Kyriakopoulou V, Andrews WD, Martin JF, Moon AM, **Illingworth E**, Basson MA, Scambler PJ. Tbx1 controls cardiac neural crest cell migration during arch artery development by regulating Gbx2 expression in the pharyngeal ectoderm. *Development* 136:3173-83. (2009) IF 7.7

(55) Sivagnanasundaram S, Fletcher D, Hubank M, **Illingworth E**, Skuse D, Scambler P. Differential gene expression in the hippocampus of the Df1/+ mice: a model for 22q11.2 deletion syndrome and schizophrenia. *Brain Res*. 1139:48-59 (2007). IF 2.5

(54) Xu, H, Viola, A, Zhang, Z, Gerken, C, **Lindsay-Illingworth**, E, Baldini, A. Tbx1 regulates population, proliferation and cell fate determination of otic epithelial cells. *Developmental Biology*, 302:670-682 (2007)

(53) Jurata, LW, Gallagher P, Lemire AL, Charles V, Brockman JA, **Illingworth E**, Altar CA. Altered expression of hippocampal dentate granule neuron genes in a mouse model of human 22q11 deletion syndrome. *Schizophr Res*. 88: 251-9 (2006). IF 4.9

(52) Paylor R and **Lindsay E**. Mouse models of 22q11 deletion syndrome. *Biological Psychiatry*, 59: 1172-1179 (2006). IF 8.9

(51) Eichers ER, Abd-El-Barr MM, Paylor R, Lewis RA, Bi W, Lin X, Meehan TP, Stockton DW, Wu SM, **Lindsay E**, Justice MJ, Beales PL, Katsanis N, Lupski JR. Phenotypic characterization of Bbs4 null mice reveals age-dependent penetrance and variable expressivity. *Hum Genet*. 120(2):211-26 (2006). IF 4.5

(50) Paylor R, Glaser B, Mupo A, Ataliotis P, Spencer C, Sobotka A, Sparks C, Choi C-H, Oghalai J, Curran S, Murphy K, Williams N, O'Donovan MC, Owen MJ, Scambler P, **Lindsay E**. *Tbx1* haploinsufficiency is linked to behavioral disorders in mice and humans: Implications for 22q11 deletion syndrome. *PNAS*, 103: 7729-7734 (2006). IF 9.4

49) Ivins S , Lammerts van Beuren K , Roberts C , James C , **Lindsay E**, Baldini A, Ataliotis P, Scambler PJ. Microarray analysis detects differentially expressed genes in the pharyngeal region of mice lacking Tbx1. *Developmental Biology*, 285: 554-569 (2005).

48) Prescott K, Ivins S, Hubank M, **Lindsay E** , Baldini A, Scambler P . Microarray analysis of the Df1 mouse model of the 22q11 deletion syndrome*. Human Molecular Genetics*, 116: 486-496 (2005).

47) Zhang Z, Cerrato F, Xu H, Vitelli F, Morishima M, Vincentz J, Furuta Y, Ma L, Martin J, Baldini A, **Lindsay E**. Tbx1 expression in pharyngeal epithelia is necessary for pharyngeal arch artery development. *Development*, 132: 5307-5315 (2005).
46) Xu H, Morishima M, Wylie, J, Schwartz R, Bruneau B, **Lindsay E**, Baldini A. Tbx1 has a dual role in morphogenesis of the outflow tract. *Development*, 131: 3217-3227 (2004).