

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel in the order listed on Form Page 2.
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NAME Sobel, Mark E.	POSITION TITLE Executive Officer		
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Brandeis University, Waltham, MA	BA	1970	Psychology
Mount Sinai School of Medicine, New York, NY	MD	1975	Medicine
Graduate School of the City University of New York	PhD	1975	Biomedical Sciences
Boston Children's Hospital Medical Center	Residency	1975-76	Pediatrics
National Cancer Institute, NIH, Bethesda, MD	Postdoctoral	1976-80	Molecular Biology

A. Positions and Honors**Positions and Employment**

- 1980-1983: Research Associate, Laboratory of Developmental Biology and Anomalies, National Institute of Dental Research, NIH, Bethesda, MD
- 1983-1992: Senior Investigator, Laboratory of Pathology, National Cancer Institute, NIH, Bethesda, MD
- 1992-2001: Chief, Molecular Pathology Section, Laboratory of Pathology, NCI, NIH, Bethesda, MD
- 2001-2006: Guest Researcher, Laboratory of Pathology, NCI, NIH, Bethesda, MD
- 2001-present: Executive Officer, American Society for Investigative Pathology, Bethesda, MD
- 2001-present: Executive Officer, Association for Molecular Pathology, Bethesda, MD
- 2001-present: Executive Officer, Intersociety Council for Pathology Information, Bethesda, MD
- 2001-present: Managing Officer, Association of Pathology Chairs, Bethesda, MD
- 2006-present: Special Volunteer, Laboratory of Pathology, NCI, NIH, Bethesda, MD

Honors and Professional Activities

- 1987-1999: Course Director, Concepts in Molecular Biology, American Society for Investigative Pathology
- 1989: Public Health Service Commendation Medal
- 1991: Saul J. Horowitz, Jr. Memorial Award, Mount Sinai School of Medicine
- 1995: Alpha Omega Alpha, Mount Sinai School of Medicine
- 1995-2000: Council, American Society for Investigative Pathology
- 1995-2000: Council, Association for Molecular Pathology
- 1995-1998: Editorial Board, Current Review of Pathology
- 1996-present: Associate Editor (1996-2001) and Editorial Board (2002-present), Diagnostic Molecular Pathology
- 1996-2008: Visiting Professor (not simultaneously) at various schools including: Emory U School of Medicine (Pathology Dept), Ball Memorial Hospital, Uniformed Services University of Health Sciences (Veterinary Dept), George Washington U Medical School (Pathology Dept), U of Miami School of Medicine (Pathology Dept), Medical College of Wisconsin (Pathology Dept), The Methodist Hospital (Houston)
- 1998-1999: President, American Society for Investigative Pathology
- 1998-present: Editorial Board, Laboratory Investigation
- 1999: President, Association for Molecular Pathology
- 2001-2008: Board of Directors, Association for the Accreditation of Human Research Protection Programs
- 2003-2006: Chair, Intersociety Pathology Council
- 2005-present: Executive Advisory Board, Archives of Pathology & Laboratory Medicine
- 2006-present: Advisory Board, Federation of American Societies for Experimental Biology (FASEB) Minority Access to Research Careers (MARC) Program
- 2006: Leadership Award, Association for Molecular Pathology
- 2007-present: Member, PubMed Central National Advisory Committee

B. Selected Peer-Reviewed Publications (in chronological order)

- Castronovo V, C Colin, AP Claysmith, PHS Chen, E Lifrange, R Lambotte, HC Krutasch, LA Liotta, ME Sobel (1990) Immunodetection of the metastasis-associated laminin receptor in human breast cancer cells obtained by fine needle aspiration biopsy. *Am J Pathol* 137:1373-1381.
- Cioce V, V Castronovo, BM Shmookler, S Garbisa, WF Grigioni, LA Liotta, ME Sobel (1991) Increased expression of the laminin receptor in human colon cancer. *J Natl Cancer Inst* 83:29-36.
- Castronovo V, G Taraboletti, ME Sobel (1991) Laminin receptor complementary DNA-deduced synthetic peptide inhibits cancer cell attachment to endothelium. *Cancer Res* 51:5672-5678.
- Castronovo V, G Taraboletti, ME Sobel (1991) Functional domains of the 67-kDa laminin receptor precursor. *J Biol Chem* 266:20440-20446.
- Campo E, C Monteagudo, V Castronovo, AP Claysmith, PL Fernandez, ME Sobel (1992) Detection of laminin receptor mRNA in human cancer cell lines and colorectal tissues by in situ hybridization. *Am J Pathol* 141:1073-1083.
- Demeter, LM, MH Stoler, ME Sobel, TR Broker, LT Chow (1992) Expression of high affinity laminin receptor mRNA correlates with cell proliferation rather than invasion in human papillomavirus-associated cervical neoplasms. *Cancer Res* 52:1561-1567.
- Sobel ME (1993) Differential expression of the 67 kDa laminin receptor in cancer. *Sem. Cancer Biol.* 4:311-317.
- Castronovo V, M Kusaka, A Chariot, and M Sobel (1994) Homeobox genes: potential candidates for the transcriptional control of the transformed and invasive phenotype. *Biochem Pharmacol* 47:137-143.
- Bernstein LR, DK Ferris, NH Colburn, and ME Sobel (1994) A family of mitogen-activated protein kinase-related proteins interacts *in vivo* with activator protein-1 transcription factor. *J Biol Chem* 269:9401-9404.
- Senterre-Lesenfants S, A Alag, and ME Sobel (1995) Multiple mRNA species are generated by alternate polyadenylation from the human calmodulin-I gene. *J Cell Biochem* 58:445-454.
- Jackers P, N Clausse, M Fernandez, F Princen, U Wewer, ME Sobel, and V Castronovo (1996) Seventeen copies of the human 37 kDa laminin receptor precursor/p40 ribosome-associated protein gene are processed pseudogenes arisen from retropositional events. *Biochim Biophys Acta* 1305:98-104.
- Jackers P, F Minoletti, D Belotti, N Clausse, G Sozzi, ME Sobel, and V Castronovo (1996) Isolation from a multigene family of the active human gene of the metastasis-associated multifunctional protein 37LRP/p40 at chromosome 3p21.3. *Oncogene* 13:495-503.
- Castronovo V, FA van den Brule, P Jackers, N Clausse, F-T Liu, C Gillet, and ME Sobel (1996) Decreased expression of galectin-3 is associated with progression of human breast cancer. *J Pathol* 179:43-48.
- Montuori N and ME Sobel (1996) The 67 kDa laminin receptor and tumor progression. *Curr Top Microbiol Immunol* 213:205-214.
- Kant, JA and ME Sobel (1996) Genetic research using archival samples: an uncertain future? *Molecular Diagnosis* 1:79-82.
- Grody WW and ME Sobel (1996) Update on informed consent for stored tissue research. *Diagnostic Molecular Pathol* 5:79-80.
- Clausse N, P Jackers, P Jares, B Joris, ME Sobel, and V Castronovo (1996) Identification of the active gene coding for the metastasis-associated 37LRP/p40 multifunctional protein. *DNA and Cell Bio* 15:1009-1023.
- Chariot A, V Castronovo, P Le, C Gillet, ME Sobel, and J Gielen (1996) Cloning and expression of a new HOXC6 transcript encoding a repressing protein. *Biochem J* 319:91-97.
- Fernandez PL, MJ Merino, M Gomez, E Campo, T Medina, V Castronovo, X Sanjuan, A Cardesa, F-T Liu, and ME Sobel (1997) Galectin-3 and laminin expression in neoplastic and non-neoplastic thyroid tissue. *J Pathol* 181:80-86.
- Menard S, V Castronovo, E Tagliabue, ME Sobel (1997) New insights into the metastasis-associated 67 kD laminin receptor. *J Cellular Biochem* 67:155-165.
- van den Brule F, A Bellahcene, P Jackers, F-T Liu., ME Sobel, and V Castronovo (1997) Antisense galectin-3 alters thymidine incorporation in human MDA-MB435 breast cancer cells. *Int J Oncol* 11:261-264.
- Buto S, C Ghirelli, P Aiello, E Tagliabue, E Ardini, A Magnifico, N Montuori, ME Sobel, MI Colnaghi, S Menard (1997) Production and characterization of monoclonal antibodies directed against the laminin receptor precursor. *Int J Biol Markers* 12:1-5.
- Sanz-Ortega J, J Sanz-Esponera, T Caldes, E Gomez de la Concha, ME Sobel, and MJ Merino (1997) LOH at the APC/MCC gene (5q21) in gastric cancer and preneoplastic lesions: prognostic implications. *Pathol Res Pract* 192:1206-1210.
- Buto S, E Tagliabue, E Ardini, A Magnifico, C Ghirelli, F van den Brule, V Castronovo, MI Colnaghi, ME Sobel, and S Menard (1998) Formation of the 67 kDa laminin receptor by acylation of the precursor. *J Cell. Biochem*

69:244-251.

- SanJuan X, BR Bryant, ME Sobel, and MJ Merino (1998) Clonality analysis of benign parathyroid lesions by human androgen receptor (HUMARA) gene assay. *Endocrine Pathol* 9:293-300.
- Ardini E, G Pesole, E Tagliabue, A Magnifico, V Castronovo., ME Sobel, MI Colnaghi, and S Menard (1998) The 67 kDa laminin receptor originated from a ribosomal protein acquired a dual function during evolution. *Mol Biol Evol* 15:1017-1025.
- Chariot A, S Senterre-Lesenfants, ME Sobel, and V Castronovo (1998) Molecular cloning of a mutated HOXB7 cDNA encoding a truncated transactivating homeodomain-containing protein. *J Cell Biochem* 71:46-54.
- Grizzle W, W Grody, W Noll, ME Sobel, SA Stass, T Trainer, H Travers, V Weedn, and K Woodruff (1999) Recommended policies for uses of human tissue in research, education, and quality control. Ad Hoc Committee on Stored Tissue, College of American Pathologists. *Arch Pathol Lab Med* 123:296-300.
- Middleton LP, F Tressera, ME Sobel, BR Bryant, A Albuquerque, P Grases, MJ Merino (1999) *Mod Pathol* 12:499-504.
- Sobel ME, Wolman SR (1999) Ethical considerations in the use of human tissues in research. *Cytometry* 38:192-193.
- Montuori N, F Muller, S de Riu, G Fenzi, ME Sobel, G Rossi and M Vitale (1999) Laminin receptors in differentiated thyroid tumors: restricted expression of the 67-kilodalton laminin receptor in follicular carcinoma cells. *J Clin Endocrinol Metab* 84:2086-2092.
- Sobel ME (1999) Ethical issues in molecular pathology: paradigms in flux. *Arch Pathol Lab Med* 123:1076-1078.
- Filie AC, A Chiesa, BR Bryant, MJ Merino, ME Sobel, A Abati (1999) The tall cell variant of papillary carcinoma of the thyroid. *Cancer Cytopathol* 87:238-242.
- Sanz-Ortega J, B Bryant, J Sanz-Esponera, JA Asenjo, MC Saez, A Torres, JL Balibrea, ME Sobel, MJ Merino (1999) LOH at the APC/MCC gene (5Q21) is frequent in early stages of non-small cell lung cancer. *Pathol Res Pract* 195:677-680.
- Krebs PA, A Albuquerque, M Quezado, B Bryant, ME Sobel, MJ Merino, CN Otis (1999) The use of microsatellite instability in the distinction between synchronous endometrial and colonic adenocarcinomas. *Int J Gynecol Pathol* 18:320-324.
- Sobel ME (2000) New challenges for biomedical research utilizing human biological materials. *J Mol Diagnostics* 2:1-4.
- Otis CN, PA Krebs, MM Quezado, A Albuquerque, B Bryant, X San Juan, D Kleiner, ME Sobel, and MJ Merino (2000) Loss of heterozygosity in P53, BRCA1, and estrogen receptor genes and correlation to expression of p53 protein in ovarian epithelial tumors of different cell types and biological behavior. *Hum Pathol* 31:233-238.
- Kleer CG, BR Bryant, TJ Giordano, M Sobel, and MJ Merino (2000) Genetic changes in chromosomes 1p and 17p in thyroid cancer progression. *Endocrine Pathol* 11:137-143.
- Prime W, ME Sobel, and CS Herrington (2000) Utilization of human tissue in breast cancer research. *Breast Cancer Res* 2:237-240.
- Sanjuan X, ME Sobel, J Yang, MJ Merino (2000) Alveolar soft part sarcoma: the role of prognostic markers. *Ann Diagn Pathol* 4:135-142.
- Otis CN, PA Krebs, A Albuquerque, MM Quezado, X San Juan, ME Sobel., and MJ Merino (2002) Loss of heterozygosity of p53, BRCA1, VHL, and Estrogen Receptor Genes in Breast Carcinoma: Correlation with Related Protein Products and Morphologic Features. *Int J Surg Pathol* 10:237-245.
- Palacios J, D Sarrio, MC Garcia-Macias, B Bryant, ME Sobel, MJ Merino (2003) Frequent E-cadherin gene inactivation by loss of heterozygosity in pleomorphic lobular carcinoma of the breast. *Mod Pathol* 16:674-678.
- Beaty MW, M Quezado, ME Sobel, P Duray, MJ Merino (2005) Loss of heterozygosity on chromosome 1 and 9 and hormone receptor analysis of metastatic malignant melanoma. *Int J Surg Pathol* 13:9-18.
- Sobel ME (2006) Signaling pathways involved in airway disease. *Arch Pathol Lab Med* 130:439.
- Sobel, ME, A Bagg, AM Caliendo, M Ladanyi, and B Zehnbaauer (2008) The evolution of molecular genetic pathology: advancing 20th-century diagnostic methods into potent tools for the new millennium. *J Mol Diagn* 10:480-483.