

CURRICULUM VITAE

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EDUCATION:

- 05/1987 M.S., Moscow State University, National Center for Medical Genetics, Moscow, Russia
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POSTGRADUATE TRAINING AND FELLOWSHIP APPOINTMENTS:

- 12/1997 Postdoctoral, Laboratory of Dr. Murray, University of Iowa, Iowa City, IA
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RESEARCH GRANTS/AWARDS/CONTRACTS/PROJECTS:

Prior

Peer Review

Title:	MAB21L Family in Human Ocular Disease and Development
Source:	NIH/NEI
PI:	Semina, Elena V, PhD
Dates:	03/01/2017 - 02/28/2021
Direct Funds:	\$1,394,474
Title:	WDR37: a novel factor in human congenital multisystem disease
Source:	NIH/NICHHD
PI:	Semina, Elena V, PhD
Dates:	07/20/2019 - 06/30/2021
Direct Funds:	\$418,000
Title:	Retinopathy of Prematurity: Genetic Mechanisms
Source:	Children's Wisconsin/Children's Research Institute
PI:	Semina EV, PhD
Dates:	01/01/2020 - 12/31/2020
Direct Funds:	\$75,000
Title:	Genetic Studies of Human Development
Source:	Children's Wisconsin/Children's Research Institute
PI:	Semina, Elena V, PhD
Dates:	01/01/2021 - 12/31/2021
Direct Funds:	\$150,000

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Refereed Journal Publications/Original Papers

1. Semina EV, Reiter R, Leysens NJ, Alward WL, Small KW, Datson NA, Siegel-Bartelt J, Bierke-Nelson D, Bitoun P, Zabel BU, Carey JC, Murray JC. Cloning and characterization of a novel bicoid-related homeobox transcription factor gene, RIEG, involved in Rieger syndrome. *Nat Genet.* 1996 Dec;14(4):392-9.
2. Semina EV, Datson NA, Leysens NJ, Zabel BU, Carey JC, Bell GI, Bitoun P, Lindgren C, Stevenson T, Frants RR, van Ommen G, Murray JC. Exclusion of epidermal growth factor and high-resolution physical mapping across the Rieger syndrome locus. *Am J Hum Genet.* 1996 Dec;59(6):1288-96. PMID: PMC1914874
3. Semina EV, Reiter RS, Murray JC. Isolation of a new homeobox gene belonging to the Pitx/Rieg family: expression during lens development and mapping to the aphakia region on mouse chromosome 19. *Hum Mol Genet.* 1997 Nov;6(12):2109-16.
4. Alward WL, Semina EV, Kalenak JW, Héon E, Sheth BP, Stone EM, Murray JC. Autosomal dominant iris hypoplasia is caused by a mutation in the Rieger syndrome (RIEG/PITX2) gene. *Am J Ophthalmol.* 1998 Jan;125(1):98-100.
5. Semina EV, Reiter RS, Murray JC. A new human homeobox gene OGI2X is a member of the most conserved homeobox gene family and is expressed during heart development in mouse. *Hum Mol Genet.* 1998 Mar;7(3):415-22.
6. Kulak SC, Kozlowski K, Semina EV, Pearce WG, Walter MA. Mutation in the RIEG1 gene in patients with iridogoniodysgenesis syndrome. *Hum Mol Genet.* 1998 Jul;7(7):1113-7.
7. Semina EV, Ferrell RE, Mintz-Hittner HA, Bitoun P, Alward WL, Reiter RS, Funkhauser C, Daack-Hirsch S, Murray JC. A novel homeobox gene PITX3 is mutated in families with autosomal-dominant cataracts and ASMD. *Nat Genet.* 1998 Jun;19(2):167-70.
8. Lidral AC, Romitti PA, Basart AM, Doetschman T, Leysens NJ, Daack-Hirsch S, Semina EV, Johnson LR, Machida J, Burds A, Parnell TJ, Rubenstein JL, Murray JC. Association of MSX1 and TGFB3 with nonsyndromic clefting in humans. *Am J Hum Genet.* 1998 Aug;63(2):557-68. PMID: PMC1377298
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12. Semina EV, Altherr MR, Murray JC. Cloning and chromosomal localization of two novel human genes encoding LIM-domain binding factors CLIM1 and CLIM2/LDB1/NLI. *Mamm Genome.* 1998 Nov;9(11):921-4.
13. St Amand TR, Zhang Y, Semina EV, Zhao X, Hu Y, Nguyen L, Murray JC, Chen Y. Antagonistic signals between BMP4 and FGF8 define the expression of Pitx1 and Pitx2 in mouse tooth-forming anlage. *Dev Biol.* 2000 Jan 15;217(2):323-32.
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- negative homeodomain mutation in Rieger syndrome. *J Biol Chem*. 2001 Jun 22;276(25):23034-41.
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