
BIOGRAPHICAL SKETCH

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NAME: **BRAVO, Luis Eduardo**

eRA COMMONS USERNAME (credential, e.g., agency login): Luis Eduardo Bravo

POSITION TITLE: Professor Department of Pathology, Universidad del Valle, School of Medicine, Cali, Colombia

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Universidad del Cauca, Popayán Colombia	MD	1981	Medicine
Universidad del Valle, Cali Colombia	Patología	1985	Patología y Laboratorio Clínico.
Universidad del Valle, Cali Colombia	Master	2003	Microbiología
Universidad del Valle, Cali Colombia	Master	2004	Epidemiología.

A. Personal Statement

El Dr. Luis E. Bravo, es profesor de Patología y Epidemiología del Cáncer en la Universidad del Valle (Cali, Colombia) y Editor Asociado de la revista Colombia Médica. Como Editor en Jefe de Colombia Médica logró en el 2014 que la revista fuera indexada en Medline y aceptada en Pubmed Central, el repositorio digital más prestigioso de artículos completos de revistas biomédicas y de ciencias de la vida.

Dirigió el Registro de Cáncer de la Universidad del Valle durante 23 años hasta su jubilación en diciembre de 2023.. El Profesor Bravo es investigador Senior en COLCIENCIAS, Medalla al Mérito Cívico Santiago de Cali, 2018; y representante regional de América Latina de la Asociación Internacional de Registros de Cáncer (IACR).

Dr. Bravo ha sido Investigador Principal para Colombia del proyecto Estudios Etiológicos del Carcinoma Gástrico, supervisó todas las actividades en Colombia, incluyendo la gestión del estudio, laboratorio de histopatología, y biorepositorio. El Dr. Bravo tiene una notable historia de colaboración con el Dr. Pelayo Correa y el equipo de la Universidad de Vanderbilt, y ha manejado los estudios de campo en Colombia y el trabajo de laboratorio relacionado desde hace más de dos décadas. El equipo de investigación, dirigido por el Dr. Bravo, ha sido notablemente estable durante el curso del proyecto de programa Estudios Etiológicos del Carcinoma Gástrico, y la aceptación y relaciones de trabajo con las comunidades en Nariño-Colombia son verdaderamente ejemplares.

Ongoing and recent funding which are relevant to cancer control capacity building and gastric cancer research in Latin America

1. Estimación global de enfermedad en adultos supervivientes de cáncer infantil de Cali, Colombia. (Mónica Quijano, Doctorado en Salud, Universidad del Valle). 2024-2027.
2. Prime Award No.2 P01 CA028842-24; P01 CA028842-32. Subaward No. VUMC 3239, 2009-2020 Etiological Studies of Gastric Carcinoma. Vanderbilt University, by and through its Medical Center, Universidad del Valle. **CI: 1641**
3. Desarrollo y validación de una escala de alarma temprana para abandono del tratamiento en niños con cáncer en 12 ciudades de Colombia. Convocatoria interna Universidad del Valle. 2021-2022. **CI: 1919**
4. Perfil epidemiológico y supervivencia del Melanoma Acral Lentiginoso en Colombia. Estudio Multicéntrico 2013-2021” Universidad del Valle-Instituto Nacional de Cancerología E.S.E., 2020-2023.**CI:1971**
5. Desarrollo Cánceres en mujeres: ¿Explican las variaciones en los patrones de cuidado las desigualdades mundiales en supervivencia y muertes prematuras evitables? – VENUSCANCER. Escuela Higiene de Londres y Universidad del Valle. 2021-2022. **CI: 1924**
6. Identificación de clústers de cáncer infantil y análisis de su relación con exposición a fuentes industriales de contaminación atmosférica en Colombia. Contrato 759 de 2017, Código 110277756922, Convocatoria 777 de 2017 de COLCIENCIAS. COLCIENCIAS, Universidad del Valle, 2017-2021. **CI: 1834**
7. Supervivencia global del cáncer de estómago en Colombia, 2016-2019. Universidad del Valle-Cuenta de Alto Costo, 2020.
8. Programa Mi Niño Ante Todo 2008. Convocatoria de proyectos en Burkina Faso, Colombia, Costa de Marfil, Paquistán y Paraguay. 2009-2015. Establecimiento de un sistema de vigilancia epidemiológica de cáncer pediátrico para la ciudad de Cali, Colombia Universidad del Valle, Unión Internacional contra Cáncer (UICC), Fundación Sanofi Espoir. 2009-2015. CI: 1629
9. Supervivencia de Cáncer en Cali, Pasto y Manizalez: Un estudio de base poblacional. 2015-2017 Instituto Nacional de Cancerología, Universidad del Valle. Contrato No. 0378-2014. 2015-2017. CI:1764 1764
10. Efecto de la vacunación contra la infección oral por el VPH16 en estudiantes de 14 a 17 años de edad en colegios de secundaria de la ciudad de Cali. Contrato No.CT-664-2014 Código del proyecto 110665741213 Convocatoria 657-2014 para la conformación de un banco de elegibles de proyectos de CTCL. COLCIENCIAS, Universidad del Valle, Secretaría de Salud Pública Municipal de Cali. 2015-2016.
CI: 1767
11. Biomarcadores de susceptibilidad humana a cáncer gástrico en el departamento de Nariño. Contrato RC-693-2014 Código del proyecto 1104-657-41577 Proyecto aprobado en el marco de la convocatoria

No. 657-2014. La entidad ejecutora del proyecto es la Universidad de Nariño, la Universidad del Valle participara como coejecutora. 2015-2016. **CI: 1774**

12. Expresión de la aparición de las mucinas gástricas embrionarias y fetales utilizando microarreglos de tejidos. Convocatoria interna 2011, Universidad del Valle. **CI: 1684**
13. Respuesta inmune Th1/Th2 en coinfección por *Helicobacter pylori* y helmintiasis en poblaciones con contraste en riesgo de desarrollar carcinoma gástrico. Convocatoria interna 2011, Universidad del Valle **CI: 1689**
14. Convenio específico No.0214 de 2012. Evaluación de la calidad de información del registro poblacional de Cáncer de Cali para la divulgación de la información. Universidad el Valle y el Instituto Nacional de Cancerología E.S.E. **CI: 1692**
15. GRANT #43930. 2009-2011. Estudio de fase III aleatorio de tres esquemas antibióticos para la erradicación de *Helicobacter pylori*. Universidad del Valle, Universidad de Michigan - Fundación Bill&Melinda Gates. **CI:1630**
16. Convenio específico No.0511, 2011. Optimización del sistema de información del Registro Poblacional de Cáncer de Cali. Universidad del Valle, Instituto Nacional de Cancerología E.S.E. **CI:1669**
17. Código 1106-493-26237. RC-510 de 2009. 2009-2011. Mutaciones puntuales en los genes 23s del rna y pbp-1a de *Helicobacter pylori*: resistencia a claritromicina y amoxicilina in vitro y su relación con fracaso terapéutico. Universidad del Valle, Instituto Colombiano para el Desarrollo de la Ciencia y la Tecnología "Francisco José de Caldas" **CI: 1643**
18. Código 1106-40820552. RC-302 de 2007. 2008-2011. Supervivencia de cáncer en Cali: Un estudio de base poblacional Universidad del Valle, Instituto Colombiano para el Desarrollo de la Ciencia y la Tecnología "Francisco José de Caldas". **CI:1567**

B. Cargos, nombramientos científicos y distinciones.

Positions and Employment

1985-1987	Hospital Mario Correa, Cali, Colombia. Patólogo.
1985	Profesor Adjunto, Departamento de Patología, Universidad Libre, Escuela de Medicina, Cali, Colombia.
1988-1991	Profesor Adjunto, Medicina, Universidad de Nariño, Facultad de Derecho, Pasto, Colombia
1988-1993	Hospital San Pedro, Pasto, Nariño, Colombia. Patólogo
1993-1994	Instructor Departamento de Patología, Universidad del Valle, School of Medicina, Cali, Colombia
1994	Fellow National Cancer Institute, Louisiana State University, Medical Center. Exchange Scientist for Medical Research in Gastric Carcinoma.
1995-2022	Principal Investigador para el trabajo de Colombia del Program Project 5P01CA028842-20. Estudios Etiológicos del Carcinoma Gástrico. Seguimiento a largo plazo de cohorte de niños y adultos infectados por <i>H. pylori</i>
1995-2000	Profesor Asistente Departamento de Patología, Universidad del Valle, Escuela Medicina, Cali, Colombia
2000-2004	Jefe Departamento de Patología, Universidad del Valle, Escuela Medicina, Cali, Colombia
2001	Profesor Asociado Departamento de Patología, Universidad Valle, Escuela Medicina, Cali, Colombia
2002-2023	Profesor Titular Departamento Patologia, Universidad del Valle, Escuela Medicina, Cali, Colombia

2002-2023	Director Registro Poblacional de Cáncer de Cali. Universidad del Valle, Escuela Medicina, Cali, Colombia
2003	UICC International Cancer Technology Transfer Fellowship International Agency for Research on Cancer (IARC), Lyon, Francia
2005-2012	Profesor Epidemiología del Cáncer, Escuela Salud Pública, Universidad del Valle, Cali, Colombia.
2007	Profesor Distinguido de Patología – Universidad del Valle
2008-Presente	Editor Asociado - Colombia Médica
2009-Presente	VIGICANCER. Sistema de vigilancia epidemiológica de cáncer infantil. Miembro fundador de POHEMA.
2010	World Health Organization (WHO) Membership in the Neoplasms Topic Advisory Group (TAG) that is contributing to the revision of the International Classification of Diseases (ICD) towards its 11th edition.
2010	Profesor Emérito de Patología – Universidad del Valle,
2013-2014	Editor en Jefe Colombia Médica
2014	International Atomic Energy Agency (IAEA). Programme of Action for Cancer Therapy (PACT) IAEA impACT mission to Peru. Experto internacional
2015-2022	Programa Editorial Universidad del Valle
2016 2021	International Atomic Energy Agency (IAEA). Programme of Action for Cancer Therapy (PACT) IAEA impACT mission to Honduras. Experto Internacional.
2021	International Atomic Energy Agency (IAEA). Programme of Action for Cancer Therapy (PACT) IAEA impACT mission to Uruguay. Experto Internacional
2016-2021	Jefe Departamento de Patología, Universidad del Valle, School of Medicine, Cali, Colombia
2017-Presente	Comité Ejecutivo, City Cancer Challenge, C/Can 2025 Cali
2022	International Atomic Energy Agency (IAEA). Programme of Action for Cancer Therapy (PACT) IAEA impACT mission to Colombia. Experto nacional.
2018-2024	Representante regional de América Latina de la Asociación Internacional de Registros de Cáncer (IACR)

Honores y distinciones

- SIOP (International Society of Paediatric Oncology). Young Investigator Awards (Karina Grillo, Doctorado en Salud, Universidad del Valle, SIOP 2023 Annual Congress, Ottawa, Canada,
- SIOP Poster Award – Poster Discussions Session 06: Best of Global Health 54 Congress of the International Society of Paediatric Oncology - September 2022.
- SIOP Award - 53rd Congress of the International Society of Paediatric Oncology – October 21-24 2021, Virtual.
- Honoric mention the 2020's Colombian National Academy of Medicine awards for the work: Childhood cancer survival disparities in a universalized health system in Cali, Colombia. Pediatric Hematology Oncology Journal. 2018; 3: 79-87. October 29th 2020
- Reconocimiento como mejor investigador de la Facultad de Salud, Universidad del Valle, 2019
- Medalla al Mérito Cívico Santiago de Cali, máxima categoría, 2018
- Representante regional de América Latina de la Asociación Internacional de Registros de Cáncer (IACR) 2018
- Investigador Senior (COLCIENCIAS, 2013-Presente) (IS)

- Société Internationale d'Oncologie Pédiatrique (SIOP). SIOP Award Paediatric Oncology in Developing Countries, 2013
- National Award of the Colombian Society of Hematology, 2012
- Profesor Emérito de Patología, Universidad del Valle, Escuela de Medicina, Cali, Colombia, 2010
- World Health Organization (WHO) Membership in the Neoplasms Topic Advisory Group (TAG) that is contributing to the revision of the International Classification of Diseases (ICD) towards its 11th edition, 2010
- UICC-My Child Matters Award 2008. Establishing a surveillance system for childhood cancer in Cali, Colombia.
- First place in the gastrointestinal category. 2nd Colombian Congress, 2nd Symposium Latin American, Ibero-American and Colombian Gastroenterology, Hepatology and Pediatric Nutrition. Research work. "*Helicobacter pylori*: validation of diagnostic tests in the pediatric population", 2007
- Distinguished Professor, Universidad del Valle, School of Medicine, Cali, Colombia, 2007
- Laureate Thesis Award. Highest honour awarded for outstanding research work. Master degree in Epidemiology. "Trends in cancer incidence in Cali through 1962-2001: An Age-period-cohort analysis. School of Public Health, Universidad del Valle, Cali, Colombia, 2005.
- Primer premio concurso: "Rafael Peña" XXV Congreso Colombiano de Anestesiología. Trabajo de investigación: Determinación de la eficacia analgésica de los bloqueos del ganglio estrellado en el alivio del dolor mediado por el sistema nervioso simpático, en pacientes con síndrome doloroso regional complejo del miembro superior. 2005
- Meritorious Thesis Award. Master degree in Medical Microbiology "Genotipificación de aislados de *Helicobacter pylori* e inmunotipificación de linfocitos en mucosa gástrica", Cali 2003.
- Colombian Cancer Research Award. Chemoprevention of gastric dysplasia: Randomized trial of antioxidant supplements and Anti-*Helicobacter pylori* therapy, Bogotá, Colombia, 1999.

C. Contribución a la ciencia

El profesor Luis Eduardo a lo largo de su vida académica ha ejecutado 34 proyectos de investigación con recurso originados en la Universidad del Valle, COLCIENCIAS, Programa Jóvenes Investigadores de COLCIENCIAS, Universidad del Vanderbilt, TN, USA; Universidad Estatal de Luisiana, LA USA, Bristol Myer-Squibb Laboratory, Fundación Bill y Melinda Gates, Instituto Nacional de Salud e Instituto Nacional de Cáncer de Estados Unidos; Instituto Nacional de Cancerología de Colombia, Instituto Nacional de Salud de Colombia, Unión Internacional contra el Cáncer, City Cancer Challenge; Escuela de Higiene de Londres, My Child Matters Program of Sanofi Espoir Foundation.

Basados en sus líneas de investigación y bajo su tutoría se han realizado trabajos de grado en pregrado, Trabajos de investigación para obtener título de magister en Epidemiología, Salud Pública, Ciencias de la Computación, Tesis para optar el grado de Doctor en Ciencias Básicas y Doctorado en Salud, trabajos de jóvenes investigadores y pasantías en modalidad internado especial de estudiantes del programa de Medicina y Cirugía.

En agosto de 2024, en Scopus tiene 145 artículos, 13,861 citaciones, de ellas 907 en 2020, y un índice de citación índice H de 41. Así mismo, en Google Scholar, 293 documentos, con 20,207 citas, índices: H 53 e iH10 127

Publicaciones:

1. Peña-Galo EM, Palacios-Navarro G, Pastora-Membreño J, Torres-Herman T, Norwood DA, Montalvan-Sanchez EE, et al. High Gastric Cancer Mortality and Years of Life Lost in Nicaragua: A Population-Based Study 1997 - 2012. *Cancer Epidemiol Biomarkers Prev.* 2024 Jun 17. doi: 10.1158/1055-9965.EPI-23-1392. Online ahead of print. PMID: 38884563
2. Ruiz de Campos L, Valdez de Cuellar M, Norwood DA, Carrasco TY, Montalvan-Sanchez EE, Rodriguez-Funez MV, et al. High Incidence of Gastric Cancer in El Salvador: A National Multisectorial Study 2000-2014. *Cancer Epidemiol Biomarkers Prev.* 2024 Jul 10. doi: 10.1158/1055-9965.EPI-23-1459. Online ahead of print. PMID: 38986141
3. Dominguez RL, Montalvan-Sanchez EE, Norwood DA, Rodriguez-Murillo A, Dominguez L, et al. Population-based Study of Gastric Cancer Survival and Associations in Rural Western Honduras. *Cancer Epidemiol Biomarkers Prev.* 2024 Jul 1. doi: 10.1158/1055-9965.EPI-23-1461. Online ahead of print. PMID: 38949525
4. Ramirez O, Piedrahita V, Ardila J, Pardo C, Cabrera-Bernal E, Lopera J, et al. Primary central nervous system tumors survival in children in ten Colombian cities: a VIGICANCER report. *Front Oncol.* 2024 Feb 27;13:1326788. doi: 10.3389/fonc.2023.1326788. eCollection 2023. PMID: 38505512 **Free PMC article.**
5. Vega-Escobar K, Bonilla-Escobar FJ, Salamanca O, Martinez-Blanco AM, Garcia LS, Bravo LE, et al. Epidemiology of Eye Cancer in Cali, Colombia: A 55-Year Study. *Ophthalmic Epidemiol.* 2024 Aug;31(4):374-384. doi: 10.1080/09286586.2023.2269253. Epub 2023 Oct 17. PMID: 37849291
6. Parra-Lara LG, Falla-Martínez JC, Isaza-Pierotti DF, Mendoza-Urbano DM, Tangua-Arias AR, Bravo LE, et al. Gastric adenocarcinoma burden, trends and survival in Cali, Colombia: A retrospective cohort study. *Front Oncol.* 2023 Mar 7;13:1069369. doi: 10.3389/fonc.2023.1069369. eCollection 2023. PMID: 36959805 **Free PMC article.**
7. Ssenyonga N, Stiller C, Nakata K, Shalkow J, Redmond S, Bulliard JL, et al. Worldwide trends in population-based survival for children, adolescents, and young adults diagnosed with leukaemia, by subtype, during 2000-14 (CONCORD-3): analysis of individual data from 258 cancer registries in 61 countries. *Lancet Child Adolesc Health.* 2022 Jun;6(6):409-431. doi: 10.1016/S2352-4642(22)00095-5. Epub 2022 Apr 22. PMID: 35468327
8. Girardi F, Matz M, Stiller C, You H, Marcos Gragera R, Valkov MY, et al. Global survival trends for brain tumors, by histology: analysis of individual records for 556,237 adults diagnosed in 59 countries during 2000-2014 (CONCORD-3). *Neuro Oncol.* 2023 Mar 14;25(3):580-592. doi: 10.1093/neuonc/noac217. PMID: 36355361 **Free PMC article.**
9. Girardi F, Di Carlo V, Stiller C, Gatta G, Woods RR, Visser O, et al. Global survival trends for brain tumors, by histology: Analysis of individual records for 67,776 children diagnosed in 61 countries during 2000-2014 (CONCORD-3). *Neuro Oncol.* 2023 Mar 14;25(3):593-606. doi: 10.1093/neuonc/noac232. PMID: 36215122 **Free PMC article.**
10. Thorell K, Muñoz-Ramírez ZY, Wang D, Sandoval-Motta S, Boscolo Agostini R, et al. The *Helicobacter pylori* Genome Project: insights into *H. pylori* population structure from analysis of a worldwide collection of complete genomes. *Nat Commun.* 2023 Dec 11;14(1):8184. doi: 10.1038/s41467-023-43562-y. PMID: 38081806 **Free PMC article.**
11. Bravo LE, Hernandez Vargas JA, Collazos P, Garcia LS, Valbuena AM, Acuna L Survival in stomach cancer: analysis of a national cancer information system and a population-based cancer registry in Colombia. *Colomb Med (Cali).* 2022 Dec 30;53(4):e2025126. doi: 10.25100/cm.v53i4.5126. eCollection 2022 Oct-Dec.

12. Parra-Lara LG, Falla-Martinez JC, Isaza-Pierotti DF, Mendoza-Urbano DM, Tangua-Arias AR, Bravo JC, Bravo LE, Zambrano AR Gastric adenocarcinoma burden, trends and survival in Cali, Colombia: A retrospective cohort study. *Front Oncol.* 2023 Mar 7;13:1069369. doi: 10.3389/fonc.2023.1069369. eCollection 2023.
13. Bravo LE, Garcia LS, Collazos P, Holguin J, Soerjomataram I, Miranda-Filho A Trends in long-term cancer survival in Cali, Colombia: 1998-2017. *Colomb Med (Cali).* 2022 Mar 30;53(1):e2035082. doi: 10.25100/cm.v53i1.5082. eCollection 2022 Jan-Mar.
14. Bravo LE, Garcia LS, Collazos P, Carrascal E, Ardila EKG, Millan E, Holguin J Cancer epidemiology in Cali, 60 years of experience. *Colomb Med (Cali).* 2022 Jan 25;53(1):e2005050. doi: 10.25100/cm.v53i1.5050. eCollection 2022 Jan-Mar.
15. Girardi F, Matz M, Stiller C, You H, Marcos Gragera R, Valkov MY, Bulliard JL, De P, Morrison D, Wanner M, O'Brian DK, Saint-Jacques N, Coleman MP, Allemanni C Global survival trends for brain tumors, by histology: analysis of individual records for 556,237 adults diagnosed in 59 countries during 2000-2014 (CONCORD-3). *Neuro Oncol.* 2023 Mar 14;25(3):580-592. doi: 10.1093/neuonc/noac217.
16. Girardi F, Di Carlo V, Stiller C, Gatta G, Woods RR, Visser O, Lacour B, Tucker TC, Coleman MP, Allemanni C Global survival trends for brain tumors, by histology: Analysis of individual records for 67,776 children diagnosed in 61 countries during 2000-2014 (CONCORD-3). *Neuro Oncol.* 2023 Mar 14;25(3):593-606. doi: 10.1093/neuonc/noac232.
17. Bravo LE, Matta AJ, Zambrano DC [Immunotyping of lymphocytes in the gastric mucosa of patients infected by H. pylori in two regions with contrast in the risk of developing gastric cancer]. *Andes Pediatr.* 2022 Jun;93(3):400-409. doi: 10.32641/andespediatr.v93i3.3667.
18. Reina C, Torres M, Munoz E, Grillo Ardila EK, Guerrero Velasco R, Bravo LEMortality due to COVID-19 during the vaccination plan against the SARS-CoV-2 virus in Cali, Colombia. *Colomb Med (Cali).* 2021 Dec 30;52(4):e7005047. doi: 10.25100/cm.v52i3.5047. eCollection 2021 Oct-Dec.
19. Ssenyonga N, Stiller C, Nakata K, Shalkow J, Redmond S, Bulliard JL, Girardi F, Fowler C, Marcos-Gragera R, Bonaventure A, Saint-Jacques N, Minicozzi P, De P, Rodriguez-Barranco M, Larongningen S, Di Carlo V, Magi M, Valkov M, Seppa K, Wyn Huws D, Coleman MP, Allemanni C Worldwide trends in population-based survival for children, adolescents, and young adults diagnosed with leukaemia, by subtype, during 2000-14 (CONCORD-3): analysis of individual data from 258 cancer registries in 61 countries. *Lancet Child Adolesc Health.* 2022 Jun;6(6):409-431. doi: 10.1016/S2352-4642(22)00095-5. Epub 2022 Apr 22.
20. Shen Z, Dzink-Fox J, Feng Y, Muthupalani S, Mannion AJ, Sheh A, Whary MT, Holcombe HR, Piazuolo BM, Bravo LE, Josenhans C, Suerbaum S, Wilson KT, Peek RM, Wang TC, Fox JG Gastric Non-Helicobacter pylori Urease-Positive Staphylococcus epidermidis and Streptococcus salivarius Isolated from Humans Have Contrasting Effects on H. pylori-Associated Gastric Pathology and Host Immune Responses in a Murine Model of Gastric Cancer. *mSphere.* 2022 Feb 23;7(1):e0077221. doi: 10.1128/msphere.00772-21. Epub 2022 Feb 9.
21. Castillo A, Giraldo S, Guzman N, Bravo LE Factors associated with the presence of the Epstein-Barr virus in the oral cavity of high school students from the city of Cali (Colombia). *Enferm Infecc Microbiol Clin (Engl Ed).* 2022 Mar;40(3):113-120. doi: 10.1016/j.eimce.2021.12.005. Epub 2022 Jan 6.
22. Norwood DA, Montalvan-Sanchez EE, Corral JE, Estevez-Ordóñez D, Paredes AA, Dominguez LB, Rodriguez AA, Bravo LE, Morgan DR, Dominguez RL Western Honduras Copan Population-Based Cancer Registry: Initial Estimates and a Model for Rural Central America. *JCO Glob Oncol.* 2021 Dec;7:1694-1702. doi: 10.1200/GO.21.00273.

23. Frech S, Bravo LE, Rodriguez I, Pomata A, Aung KT, Soe AN, Hornburg B, Guarner J, Brock J, Camacho R, Milner D Strengthening Pathology Capacity to Deliver Quality Cancer Care in Cities in LMICs. *JCO Glob Oncol*. 2021 Jun;7:917-924. doi: 10.1200/GO.20.00604.
24. Aragon N, Ordonez D, Urrea MF, Holguin J, Collazos P, Garcia LS, Osorio MC, Barreto JM, Bravo LE Head and neck cancer in Cali, Colombia: Population-based study. *Community Dent Oral Epidemiol*. 2022 Aug;50(4):292-299. doi: 10.1111/cdoe.12671. Epub 2021 Jun 8.
25. Guerrero R, Bravo LE, Munoz E, Ardila EKG, Guerrero E COVID-19: The Ivermectin African Enigma. *Colomb Med (Cali)*. 2020 Dec 30;51(4):e2014613. doi: 10.25100/cm.v51i4.4613.
26. Girardi F, Rous B, Stiller CA, Gatta G, Fersht N, Storm HH, Rodrigues JR, Herrmann C, Marcos-Gragera R, Peris-Bonet R, Valkov M, Weir HK, Woods RR, You H, Cueva PA, De P, Di Carlo V, Johannesen TB, Lima CA, Lynch CF, Coleman MP, Allemani C The histology of brain tumors for 67 331 children and 671 085 adults diagnosed in 60 countries during 2000-2014: a global, population-based study (CONCORD-3). *Neuro Oncol*. 2021 Oct 1;23(10):1765-1776. doi: 10.1093/neuonc/noab067.
27. Pineros M, Abriata MG, de Vries E, Barrios E, Bravo LE, Cueva P, de Camargo Cancela M, Fernandez L, Gil E, Luciani S, Pardo C, Zoss W, Bray F, Mery L Progress, challenges and ways forward supporting cancer surveillance in Latin America. *Int J Cancer*. 2021 Jul 1;149(1):12-20. doi: 10.1002/ijc.33407. Epub 2020 Dec 14.
28. Piazuelo MB, Bravo LE, Mera RM, Camargo MC, Bravo JC, Delgado AG, Washington MK, Rosero A, Garcia LS, Realpe JL, Cifuentes SP, Morgan DR, Peek RM Jr, Correa P, Wilson K The Colombian Chemoprevention Trial: 20-Year Follow-Up of a Cohort of Patients With Gastric Precancerous Lesions. *Gastroenterology*. 2021 Mar;160(4):1106-1117.e3. doi: 10.1053/j.gastro.2020.11.017. Epub 2020 Nov 18.
29. Riano I, Bravo P, Bravo LE, Garcia LS, Collazos P, Carrascal E Incidence, Mortality, and Survival Trends of Primary CNS Tumors in Cali, Colombia, From 1962 to 2019. *JCO Glob Oncol*. 2020 Nov;6:1712-1720. doi: 10.1200/GO.20.00368.
30. Rodriguez-Villamizar LA, Moreno-Corzo FE, Valbuena-Garcia AM, Uribe Perez CJ, Brome Bohorquez MR, Garcia Garcia HI, Bravo LE, Ortiz Martinez RG, Niederbacher Velasquez J, Osornio-Vargas A R Childhood Leukemia in Small Geographical Areas and Proximity to Industrial Sources of Air Pollutants in Three Colombian Cities. *Int J Environ Res Public Health*. 2020 Oct 29;17(21):7925. doi: 10.3390/ijerph17217925.
31. Valadas M T T R T, Bravo L E A De Clerambault's syndrome revisited: a case report of Erotomania in a male. *BMC Psychiatry*. 2020 Oct 23;20(1):516. doi: 10.1186/s12888-020-02921-5.
32. Grillo Ardila EK, Santaella-Tenorio J, Guerrero R, Bravo L E Mathematical model and COVID-19. *Colomb Med (Cali)*. 2020 Jun 30;51(2):e4277. doi: 10.25100/cm.v51i2.4277.
33. Bravo LE, Collazos P, Grillo Ardila EK, Garcia LS, Millan E, Mera P, Holguin J Mortality from respiratory infections and chronic non-communicable diseases before the COVID-19 pandemic in Cali, Colombia. *Colomb Med (Cali)*. 2020 Jun 30;51(2):e4270. doi: 10.25100/cm.v51i2.4270.
34. Castillo A, Giraldo S, Guzman N, Bravo L E Factors associated with the presence of the Epstein-Barr virus in the oral cavity of high school students from the city of Cali (Colombia). *Enferm Infec Microbiol Clin (Engl Ed)*. 2020 Sep 29:S0213-005X(20)30277-9. doi: 10.1016/j.eimc.2020.08.012.
35. Bravo LE, Matta AJ, Restrepo-Avenia JM [Immune response Th1/Th2 to Helicobacter pylori and Helminths in co-infected patients]. *Rev Chil Pediatr*. 2020 Jun;91(3):363-370. doi: 10.32641/rchped.v91i3.1431.
36. Whary MT, Avenia JMR, Bravo LE, Lofgren JL, Lertpiriyapong K, Mera-Giler R, Piazuelo MB, Correa P, Peek RM Jr, Wilson KT, Fox J G Contrasting serum biomarker profiles in two Colombian populations with different risks for progression of premalignant gastric lesions during chronic Helicobacter pylori

- infection.Cancer Epidemiol. 2020 Aug;67:101726. doi: 10.1016/j.canep.2020.101726. Epub 2020 May 21.
37. Castillo A, Osorio JC, Fernandez A, Mendez F, Alarcon L, Arturo G, Herrero R, Bravo LE Effect of vaccination against oral HPV-16 infection in high school students in the city of Cali, Colombia. *Papillomavirus Res.* 2019 Jun;7:112-117. doi: 10.1016/j.pvr.2019.03.001. Epub 2019 Mar 7.
 38. Ramirez O, Aristizabal P, Zaidi A, Ribeiro RC, Bravo LE Implementing a Childhood Cancer Outcomes Surveillance System Within a Population-Based Cancer Registry. *J Glob Oncol.* 2018 Sep;4:1-11. doi: 10.1200/JGO.17.00193.
 39. Garcia LS, Bravo LE, Collazos P, Ramirez O, Carrascal E, Nunez M, Portilla N, Millan E Cali cancer registry methods. *Colomb Med (Cali).* 2018 Mar 30;49(1):109-120. doi: 10.25100/cm.v49i1.3853.
 40. Yepez MC, Jurado DM, Bravo LM, Bravo LE Trends on cancer incidence and mortality in Pasto, Colombia. 15 years experience. *Colomb Med (Cali).* 2018 Mar 30;49(1):42-54. doi: 10.25100/cm.v49i1.3616.
 41. Bravo LE, Garcia LS, Collazos P, Carrascal E, Ramirez O, Collazos T, Cortes A, Nunez M, Millan E Reliable information for cancer control in Cali, Colombia. *Colomb Med (Cali).* 2018 Mar 30;49(1):23-34. doi: 10.25100/cm.v49i1.3689.
 42. Bravo LE, Munoz N Epidemiology of cancer in Colombia. *Colomb Med (Cali).* 2018 Mar 30;49(1):9-12. doi: 10.25100/cm.v49i1.3877.
 43. Allemani C, Matsuda T, Di Carlo V, Harewood R, Matz M, Niksic M, Bonaventure A, Valkov M, Johnson CJ, Esteve J, Ogunbiyi OJ, Azevedo E Silva G, Chen WQ, Eser S, Engholm G, Stiller CA, Monnereau A, Woods RR, Visser O, Lim GH, Aitken J, Weir HK, Coleman MP Global surveillance of trends in cancer survival 2000-14 (CONCORD-3): analysis of individual records for 37 513 025 patients diagnosed with one of 18 cancers from 322 population-based registries in 71 countries. *Lancet.* 2018 Mar 17;391(10125):1023-1075. doi: 10.1016/S0140-6736(17)33326-3. Epub 2018 Jan 31.
 44. Bravo LE, Arboleda OI, Ramirez O, Duran A, Lesmes MC, Rendler-Garcia M, Frech S, Camacho R, Henshall S Cali, Colombia, Key learning City C/Can 2025: City Cancer Challenge. *Colomb Med (Cali).* 2017 Jun 30;48(2):39-40. doi: 10.25100/cm.v48i2.3203.
 45. Matz M, Coleman MP, Carreira H, Salmeron D, Chirlaque MD, Allemani C Erratum to "Worldwide comparison of ovarian cancer survival: Histological group and stage at diagnosis (CONCORD-2)" [*Gynecol. Oncol.* 144 (2017) 396-404]. *Gynecol Oncol.* 2017 Dec;147(3):725. doi: 10.1016/j.ygyno.2017.06.033. Epub 2017 Jul 5.
 46. Matz M, Coleman MP, Sant M, Chirlaque MD, Visser O, Gore M, Allemani C Erratum to "The histology of ovarian cancer: Worldwide distribution and implications for international survival comparisons (CONCORD-2)" [*Gynecol. Oncol.* 144 (2017) 405-413]. *Gynecol Oncol.* 2017 Dec;147(3):726. doi: 10.1016/j.ygyno.2017.06.032. Epub 2017 Jul 5.
 47. Mera RM, Bravo LE, Camargo MC, Bravo JC, Delgado AG, Romero-Gallo J, Yepez MC, Realpe JL, Schneider BG, Morgan DR, Peek RM Jr, Correa P, Wilson KT, Piazuelo MB Dynamics of *Helicobacter pylori* infection as a determinant of progression of gastric precancerous lesions: 16-year follow-up of an eradication trial. *Gut.* 2018 Jul;67(7):1239-1246. doi: 10.1136/gutjnl-2016-311685. Epub 2017 Jun 24.
 48. Garay J, Piazuelo MB, Lopez-Carrillo L, Leal YA, Majumdar S, Li L, Cruz-Rodriguez N, Serrano-Gomez SJ, Busso CS, Schneider BG, Delgado AG, Bravo LE, Crist AM, Meadows SM, Camargo MC, Wilson KT, Correa P, Zabaleta J Increased expression of deleted in malignant brain tumors (DMBT1) gene in precancerous gastric lesions: Findings from human and animal studies. *Oncotarget.* 2017 Jul 18;8(29):47076-47089. doi: 10.18632/oncotarget.16792.
 49. Bonaventure A, Harewood R, Stiller CA, Gatta G, Clavel J, Stefan DC, Carreira H, Spika D, Marcos-Gragera R, Peris-Bonet R, Pineros M, Sant M, Kuehni CE, Murphy MFG, Coleman MP,

- Allemani C Worldwide comparison of survival from childhood leukaemia for 1995-2009, by subtype, age, and sex (CONCORD-2): a population-based study of individual data for 89 828 children from 198 registries in 53 countries. *Lancet Haematol.* 2017 May;4(5):e202-e217. doi: 10.1016/S2352-3026(17)30052-2. Epub 2017 Apr 11.
50. Steliarova-Foucher E, Colombet M, Ries LAG, Moreno F, Dolya A, Bray F, Hesselting P, Shin HY, Stiller CA International incidence of childhood cancer, 2001-10: a population-based registry study. *Lancet Oncol.* 2017 Jun;18(6):719-731. doi: 10.1016/S1470-2045(17)30186-9. Epub 2017 Apr 11.
51. Pazos A, Kodaman N, Piazuelo MB, Romero-Gallo J, Sobota RS, Israel DA, Bravo LE, Morgan DR, Wilson KT, Correa P, Peek RM Jr, Williams SM, Schneider BG Draft Genome Sequences of 13 Colombian *Helicobacter pylori* Strains Isolated from Pacific Coast and Andean Residents. *Genome Announc.* 2017 Apr 13;5(15):e00113-17. doi: 10.1128/genomeA.00113-17.
52. Bustamante-Rengifo JA, Matta AJ, Pazos AJ, Bravo LE Effect of treatment failure on the CagA EPIYA motif in *Helicobacter pylori* strains from Colombian subjects. *World J Gastroenterol.* 2017 Mar 21;23(11):1980-1989. doi: 10.3748/wjg.v23.i11.1980.
53. Matta AJ, Pazos AJ, Bustamante-Rengifo JA, Bravo LE Genomic variability of *Helicobacter pylori* isolates of gastric regions from two Colombian populations. *World J Gastroenterol.* 2017 Feb 7;23(5):800-809. doi: 10.3748/wjg.v23.i5.800.
54. Sanabria-Salas MC, Hernandez-Suarez G, Umana-Perez A, Rawlik K, Tenesa A, Serrano-Lopez ML, Sanchez de Gomez M, Rojas MP, Bravo LE, Albis R, Plata JL, Green H, Borgovan T, Li L, Majumdar S, Garai J, Lee E, Ashktorab H, Brim H, Li L, Margolin D, Fejerman L, Zabaleta JIL1B-CGTC haplotype is associated with colorectal cancer in admixed individuals with increased African ancestry. *Sci Rep.* 2017 Feb 3;7:41920. doi: 10.1038/srep41920.
55. Matz M, Coleman MP, Sant M, Chirlaque MD, Visser O, Gore M, Allemani C The histology of ovarian cancer: worldwide distribution and implications for international survival comparisons (CONCORD-2). *Gynecol Oncol.* 2017 Feb;144(2):405-413. doi: 10.1016/j.ygyno.2016.10.019. Epub 2016 Dec 6.
56. Matz M, Coleman MP, Carreira H, Salmeron D, Chirlaque MD, Allemani C Worldwide comparison of ovarian cancer survival: Histological group and stage at diagnosis (CONCORD-2). *Gynecol Oncol.* 2017 Feb;144(2):396-404. doi: 10.1016/j.ygyno.2016.11.019. Epub 2016 Dec 2.
57. de Vries E, Pardo C, Arias N, Bravo LE, Navarro E, Uribe C, Yopez MC, Jurado D, Garci LS, Pineros M, Edwards P, Beebe MC, Tangka F, Subramanian S Estimating the cost of operating cancer registries: Experience in Colombia. *Cancer Epidemiol.* 2016 Dec;45 Suppl 1(Suppl 1):S13-S19. doi: 10.1016/j.canep.2016.09.014. Epub 2016 Oct 17.
58. Murray-Stewart T, Sierra JC, Piazuelo MB, Mera RM, Chaturvedi R, Bravo LE, Correa P, Schneider BG, Wilson KT, Casero RA Epigenetic silencing of miR-124 prevents spermine oxidase regulation: implications for *Helicobacter pylori*-induced gastric cancer. *Oncogene.* 2016 Oct 20;35(42):5480-5488. doi: 10.1038/onc.2016.91. Epub 2016 Apr 4.
59. Sierra MS, Cueva P, Bravo LE, Forman D Stomach cancer burden in Central and South America. *Cancer Epidemiol.* 2016 Sep;44 Suppl 1:S62-S73. doi: 10.1016/j.canep.2016.03.008.
60. Bravo LE Estimating the incidence and mortality of cancer in Colombia: What are the best data for public policies? *Colomb Med (Cali).* 2016 Jun 30;47(2):71-3.
61. Sobota RS, Kodaman N, Mera R, Piazuelo MB, Bravo LE, Pazos A, Zabaleta J, Delgado AG, El-Rifai W, Morgan DR, Wilson KT, Correa P, Williams SM, Schneider BG Erratum to: Epigenetic and genetic variation in GATA5 is associated with gastric disease risk. *Hum Genet.* 2016 Aug;135(8):907-908. doi: 10.1007/s00439-016-1708-0.

62. Sobota RS, Kodaman N, Mera R, Piazuolo MB, Bravo LE, Pazos A, Zabaleta J, Delgado AG, El-Rifai W, Morgan DR, Wilson KT, Correa P, Williams SM, Schneider BGEpigenetic and genetic variation in GATA5 is associated with gastric disease risk.Hum Genet. 2016 Aug;135(8):895-906. doi: 10.1007/s00439-016-1687-1. Epub 2016 May 25.
63. Ospina-Romero M, Portilla CA, Bravo LE, Ramirez OCaregivers' Self-Reported Absence of Social Support Networks is Related to Treatment Abandonment in Children With Cancer.Pediatr Blood Cancer. 2016 May;63(5):825-31. doi: 10.1002/pbc.25919. Epub 2016 Feb 12.
64. Sanchez GI, Bravo LE, Hernandez-Suarez G, Tous S, Alemany L, de Sanjose S, Bosch FX, Munoz NSecular trends of HPV genotypes in invasive cervical cancer in Cali, Colombia 1950-1999.Cancer Epidemiol. 2016 Feb;40:173-8. doi: 10.1016/j.canep.2015.12.008. Epub 2016 Jan 6.
65. Yang I, Woltemate S, Piazuolo MB, Bravo LE, Yopez MC, Romero-Gallo J, Delgado AG, Wilson KT, Peek RM, Correa P, Josenhans C, Fox JG, Suerbaum SDifferent gastric microbiota compositions in two human populations with high and low gastric cancer risk in Colombia.Sci Rep. 2016 Jan 5;6:18594. doi: 10.1038/srep18594.
66. Bravo LE, Garcia LS, Carrascal E, Rubiano J, Cortes A, Collazos P, Munoz N, Restrepo JA, Garcia-Perdomo HA, Carbonell JResponse to Dr. de Vries.Salud Publica Mex. 2015 May-Jun;57(3):195-8.
67. Schneider BG, Mera R, Piazuolo MB, Bravo JC, Zabaleta J, Delgado AG, Bravo LE, Wilson KT, El-Rifai W, Peek RM Jr, Correa P DNA Methylation Predicts Progression of Human Gastric Lesions.Cancer Epidemiol Biomarkers Prev. 2015 Oct;24(10):1607-13. doi: 10.1158/1055-9965.EPI-15-0388. Epub 2015 Aug 12.
68. Ordonez D, Aragon N, Garcia LS, Collazos P, Bravo LE[Oral cancer in Cali, Colombia: a population-based analysis of incidence and mortality trends].Salud Publica Mex. 2014 Sep-Oct;56(5):465-72.
69. Armando C, Bravo LE, Clin P, Garcia LS, Collazos P[Colorectal cancer incidence, mortality and survival in Cali, Colombia, 1962-2012].Salud Publica Mex. 2014 Sep-Oct;56(5):457-64.
70. Bravo LE, Garcia LS, Carrascal E, Rubiano JBurden of breast cancer in Cali, Colombia: 1962-2012.Salud Publica Mex. 2014 Sep-Oct;56(5):448-56. doi: 10.21149/spm.v56i5.7370.
71. Restrepo JA, Bravo LE, Garcia-Perdomo HA, Garcia LS, Collazos P, Carbonell J[Prostate cancer in Cali, Colombia, 1962-2011: incidence, mortality and survival].Salud Publica Mex. 2014 Sep-Oct;56(5):440-7.
72. Munoz N, Bravo LE Epidemiology of cervical cancer in Colombia.Salud Publica Mex. 2014 Sep-Oct;56(5):431-9. doi: 10.21149/spm.v56i5.7368.
73. Allemani C, Weir HK, Carreira H, Harewood R, Spika D, Wang XS, Bannon F, Ahn JV, Johnson CJ, Bonaventure A, Marcos-Gragera R, Stiller C, Azevedo e Silva G, Chen WQ, Ogunbiyi OJ, Rachet B, Soeberg MJ, You H, Matsuda T, Bielska-Lasota M, Storm H, Tucker TC, Coleman MPGlobal surveillance of cancer survival 1995-2009: analysis of individual data for 25,676,887 patients from 279 population-based registries in 67 countries (CONCORD-2).Lancet. 2015 Mar 14;385(9972):977-1010. doi: 10.1016/S0140-6736(14)62038-9. Epub 2014 Nov 26.
74. Pardo C, Bravo LE, Uribe C, Lopez G, Yopez MC, Navarro E, de Vries E, Pineros MComprehensive assessment of population-based cancer registries: an experience in Colombia.J Registry Manag. 2014 Fall;41(3):128-34.
75. Bravo LE, Garcia LS, Collazos PACancer survival in Cali, Colombia: A population-based study, 1995-2004.Colomb Med (Cali). 2014 Sep 30;45(3):110-6. eCollection 2014 Jul-Sep.
76. Chaturvedi R, de Sablet T, Asim M, Piazuolo MB, Barry DP, Verriere TG, Sierra JC, Hardbower DM, Delgado AG, Schneider BG, Israel DA, Romero-Gallo J, Nagy TA, Morgan DR, Murray-Stewart T, Bravo

- LE, Peek RM Jr, Fox JG, Woster PM, Casero RA Jr, Correa P, Wilson KT Increased Helicobacter pylori-associated gastric cancer risk in the Andean region of Colombia is mediated by spermine oxidase. *Oncogene*. 2015 Jun;34(26):3429-40. doi: 10.1038/onc.2014.273. Epub 2014 Sep 1.
77. Gobert AP, Verriere T, Asim M, Barry DP, Piazuolo MB, de Sablet T, Delgado AG, Bravo LE, Correa P, Peek RM Jr, Chaturvedi R, Wilson KTHeme oxygenase-1 dysregulates macrophage polarization and the immune response to Helicobacter pylori. *J Immunol*. 2014 Sep 15;193(6):3013-22. doi: 10.4049/jimmunol.1401075. Epub 2014 Aug 8.
78. Halec G, Alemany L, Lloveras B, Schmitt M, Alejo M, Bosch FX, Tous S, Klaustermeier JE, Guimera N, Grabe N, Lahrmann B, Gissmann L, Quint W, Bosch FX, de Sanjose S, Pawlita M Pathogenic role of the eight probably/possibly carcinogenic HPV types 26, 53, 66, 67, 68, 70, 73 and 82 in cervical cancer. *J Pathol*. 2014 Dec;234(4):441-51. doi: 10.1002/path.4405. Epub 2014 Sep 12.
79. Bravo LE From printing to Scielo and Pubmed Central. *Colomb Med (Cali)*. 2014 Mar 30;45(1):5-6. eCollection 2014 Jan-Mar.
80. Bravo LE, Garcia LS, Collazos P, Aristizabal P, Ramirez O Descriptive epidemiology of childhood cancer in Cali: Colombia 1977-2011. *Colomb Med (Cali)*. 2013 Sep 30;44(3):155-64. eCollection 2013 Jul.
81. Ortega-Avila JG, Mosquera M, Echeverri-Jimenez I, Jimenez-Bastidas L, Suarez-Ortegon MF, Pradilla A, Bravo LE, Aguilar-de Plata C Early atherosclerotic lesions and post-mortem serum cholesterol level in a group of Colombian children. *Biomedica*. 2013 Jul-Sep;33(3):468-86. doi: 10.7705/biomedica.v33i3.1443.
82. Chaturvedi R, Asim M, Piazuolo MB, Yan F, Barry DP, Sierra JC, Delgado AG, Hill S, Casero RA Jr, Bravo LE, Dominguez RL, Correa P, Polk DB, Washington MK, Rose KL, Schey KL, Morgan DR, Peek RM Jr, Wilson KTA ctivation of EGFR and ERBB2 by Helicobacter pylori results in survival of gastric epithelial cells with DNA damage. *Gastroenterology*. 2014 Jun;146(7):1739-51.e14. doi: 10.1053/j.gastro.2014.02.005. Epub 2014 Feb 13.
83. Kodaman N, Pazos A, Schneider BG, Piazuolo MB, Mera R, Sobota RS, Sicinschi LA, Shaffer CL, Romero-Gallo J, de Sablet T, Harder RH, Bravo LE, Peek RM Jr, Wilson KT, Cover TL, Williams SM, Correa P Human and Helicobacter pylori coevolution shapes the risk of gastric disease. *Proc Natl Acad Sci U S A*. 2014 Jan 28;111(4):1455-60. doi: 10.1073/pnas.1318093111. Epub 2014 Jan 13.
84. Alemany L, de Sanjose S, Tous S, Quint W, Vallejos C, Shin HR, Bravo LE, Alonso P, Lima MA, Guimera N, Klaustermeier J, Llombart-Bosch A, Kasamatsu E, Tatti SA, Felix A, Molina C, Velasco J, Lloveras B, Clavero O, Lerma E, Laco J, Bravo IG, Guarch R, Pelayo A, Ordi J, Andujar M, Sanchez GI, Castellsague X, Munoz N, Bosch FX Time trends of human papillomavirus types in invasive cervical cancer, from 1940 to 2007. *Int J Cancer*. 2014 Jul 1;135(1):88-95. doi: 10.1002/ijc.28636. Epub 2013 Dec 30.
85. Schneider BG, Piazuolo MB, Sicinschi LA, Mera R, Peng DF, Roa JC, Romero-Gallo J, Delgado AG, de Sablet T, Bravo LE, Wilson KT, El-Rifai W, Peek RM Jr, Correa P Virulence of infecting Helicobacter pylori strains and intensity of mononuclear cell infiltration are associated with levels of DNA hypermethylation in gastric mucosae. *Epigenetics*. 2013 Nov;8(11):1153-61. doi: 10.4161/epi.26072. Epub 2013 Aug 22.
86. Bustamante-Rengifo JA, Matta AJ, Pazos A, Bravo LE In vitro effect of amoxicillin and clarithromycin on the 3' region of cagA gene in Helicobacter pylori isolates. *World J Gastroenterol*. 2013 Sep 28;19(36):6044-54. doi: 10.3748/wjg.v19.i36.6044.
87. Arboleda RN, Schneider BG, Bravo LE, Romero-Gallo J, Peek RM Jr, Mera RM, Yeppez MC, Campo C, Correa P Use of the noninvasive entero-test in the detection of Helicobacter pylori in children in an endemic area in Colombia. *J Pediatr Gastroenterol Nutr*. 2013 Aug;57(2):192-6. doi: 10.1097/MPG.0b013e318293e1e1.

88. Bustamante-Rengifo JA, Sua LF, Astudillo M, Bravo LE Solitary intracranial tuberculoma mimicking a malignant tumor in a patient without tubercular lesions or a history of disease: a case report. *Bosn J Basic Med Sci.* 2013 May;13(2):129-33. doi: 10.17305/bjbms.2013.2396.
89. Cendales R, Pardo C, Uribe C, Lopez G, Yepez MC, Bravo LE Data quality at population-based cancer registries in Colombia. *Biomedica.* 2012 Oct-Dec;32(4):536-44. doi: 10.1590/S0120-41572012000400009.
90. Morgan DR, Torres J, Sexton R, Herrero R, Salazar-Martinez E, Greenberg ER, Bravo LE, Dominguez RL, Ferreccio C, Lazcano-Ponce EC, Meza-Montenegro MM, Pena EM, Pena R, Correa P, Martinez ME, Chey WD, Valdivieso M, Anderson GL, Goodman GE, Crowley JJ, Baker LH Risk of recurrent *Helicobacter pylori* infection 1 year after initial eradication therapy in 7 Latin American communities. *JAMA.* 2013 Feb 13;309(6):578-86. doi: 10.1001/jama.2013.311.
91. Noto JM, Gaddy JA, Lee JY, Piazuolo MB, Friedman DB, Colvin DC, Romero-Gallo J, Suarez G, Loh J, Slaughter JC, Tan S, Morgan DR, Wilson KT, Bravo LE, Correa P, Cover TL, Amieva MR, Peek RM Jr Iron deficiency accelerates *Helicobacter pylori*-induced carcinogenesis in rodents and humans. *J Clin Invest.* 2013 Jan;123(1):479-92. doi: 10.1172/JCI64373. Epub 2012 Dec 21.
92. Figueroa M, Cortes A, Pazos A, Bravo LE [Antimicrobial susceptibility of *Helicobacter pylori* with chronic gastritis]. *Biomedica.* 2012 Jan-Mar;32(1):32-42. doi: 10.1590/S0120-41572012000100005.
93. Munoz N, Bravo LE Epidemiology of cervical cancer in Colombia. *Colomb Med (Cali).* 2012 Dec 30;43(4):298-304. eCollection 2012 Oct.
94. Saldarriaga-Cantillo A, Bravo LE, Londono O, Garcia LS, Collazos PEpidemiological surveillance of the HIV/AIDS complex through the analysis of trends in the incidence of Kaposi's sarcoma in Cali, Colombia. *Colomb Med (Cali).* 2012 Dec 30;43(4):273-80. eCollection 2012 Oct.
95. Yepez MC, Bravo LE, Hidalgo Troya A, Jurado DM, Bravo LM Cancer incidence and mortality in the municipality of Pasto, 1998 - 2007. *Colomb Med (Cali).* 2012 Dec 30;43(4):256-66. eCollection 2012 Oct.
96. Bravo LE, Collazos T, Collazos P, Garcia LS, Correa P Trends of cancer incidence and mortality in Cali, Colombia. 50 years experience. *Colomb Med (Cali).* 2012 Dec 30;43(4):246-55. eCollection 2012 Oct.
97. Geraets D, Alemany L, Guimera N, de Sanjose S, de Koning M, Molijn A, Jenkins D, Bosch X, Quint W Detection of rare and possibly carcinogenic human papillomavirus genotypes as single infections in invasive cervical cancer. *J Pathol.* 2012 Dec;228(4):534-43. doi: 10.1002/path.4065.
98. Loh JT, Friedman DB, Piazuolo MB, Bravo LE, Wilson KT, Peek RM Jr, Correa P, Cover TL Analysis of *Helicobacter pylori* cagA promoter elements required for salt-induced upregulation of CagA expression. *Infect Immun.* 2012 Sep;80(9):3094-106. doi: 10.1128/IAI.00232-12. Epub 2012 Jun 18.
99. Ek C, Whary MT, Ihrig M, Bravo LE, Correa P, Fox JG Serologic evidence that ascaris and toxoplasma infections impact inflammatory responses to *Helicobacter pylori* in Colombians. *Helicobacter.* 2012 Apr;17(2):107-15. doi: 10.1111/j.1523-5378.2011.00916.x.
100. Sicinschi LA, Correa P, Bravo LE, Peek RM Jr, Wilson KT, Loh JT, Yepez MC, Gold BD, Thompson DT, Cover TL, Schneider BG Non-invasive genotyping of *Helicobacter pylori* cagA, vacA, and hopQ from asymptomatic children. *Helicobacter.* 2012 Apr;17(2):96-106. doi: 10.1111/j.1523-5378.2011.00919.x.
101. Mera RM, Bravo LE, Goodman KJ, Yepez MC, Correa P Long-term effects of clearing *Helicobacter pylori* on growth in school-age children. *Pediatr Infect Dis J.* 2012 Mar;31(3):263-6. doi: 10.1097/INF.0b013e3182443fec.
102. Navas MC, Suarez I, Carreno A, Uribe D, Rios WA, Cortes-Mancera F, Martel G, Vieco B, Lozano D, Jimenez C, Gouas D, Osorio G, Hoyos S, Restrepo JC, Correa G, Jaramillo S, Lopez R, Bravo LE, Arbelaez MP, Scoazec JY, Abedi-Ardekani B, Santella RM, Chemin I, Hainaut P Hepatitis B and

- Hepatitis C Infection Biomarkers and TP53 Mutations in Hepatocellular Carcinomas from Colombia. *Hepat Res Treat.* 2011;2011:582945. doi: 10.1155/2011/582945. Epub 2011 Oct 31.
103. Loh JT, Shaffer CL, Piazuolo MB, Bravo LE, McClain MS, Correa P, Cover TL Analysis of cagA in Helicobacter pylori strains from Colombian populations with contrasting gastric cancer risk reveals a biomarker for disease severity. *Cancer Epidemiol Biomarkers Prev.* 2011 Oct;20(10):2237-49. doi: 10.1158/1055-9965.EPI-11-0548. Epub 2011 Aug 22.
104. Greenberg ER, Anderson GL, Morgan DR, Torres J, Chey WD, Bravo LE, Dominguez RL, Ferreccio C, Herrero R, Lazcano-Ponce EC, Meza-Montenegro MM, Pena R, Pena EM, Salazar-Martinez E, Correa P, Martinez ME, Valdivieso M, Goodman GE, Crowley JJ, Baker LH 14-day triple, 5-day concomitant, and 10-day sequential therapies for Helicobacter pylori infection in seven Latin American sites: a randomised trial. *Lancet.* 2011 Aug 6;378(9790):507-14. doi: 10.1016/S0140-6736(11)60825-8. Epub 2011 Jul 21.
105. Diaz YV, Nichols-Vinueza DX, Alvarez-Argote J, Gutierrez-Montealegre A, Garcia LE, Bravo LE. Survival to leukemia and lymphomas in children at a University Hospital in Cali, Colombia. *J Pediatr Hematol Oncol.* 2011 Oct;33(7):e284-8. doi: 10.1097/MPH.0b013e31820d0eb9.
106. de Sablet T, Piazuolo MB, Shaffer CL, Schneider BG, Asim M, Chaturvedi R, Bravo LE, Sicinschi LA, Delgado AG, Mera RM, Israel DA, Romero-Gallo J, Peek RM Jr, Cover TL, Correa P, Wilson KT Phylogeographic origin of Helicobacter pylori is a determinant of gastric cancer risk. *Gut.* 2011 Sep;60(9):1189-95. doi: 10.1136/gut.2010.234468. Epub 2011 Feb 25.
107. Goodman KJ, Correa P, Mera R, Yopez MC, Ceron C, Campo C, Guerrero N, Sierra MS, Bravo LE Effect of Helicobacter pylori infection on growth velocity of school-age Andean children. *Epidemiology.* 2011 Jan;22(1):118-26. doi: 10.1097/EDE.0b013e3181fe7e31.
108. Kasamatsu E, Bravo LE, Bravo JC, Aguirre-Garcia J, Flores-Luna L, Nunes-Velloso Mdel C, Hernandez-Suarez G [Reproducibility of histopathologic diagnosis of precursor lesions of gastric carcinoma in three Latin American countries]. *Salud Publica Mex.* 2010 Sep-Oct;52(5):386-90. doi: 10.1590/s0036-36342010000500005.
109. de Sanjose S, Quint WG, Alemany L, Geraets DT, Klaustermeier JE, Lloveras B, Tous S, Felix A, Bravo LE, Shin HR, Vallejos CS, de Ruiz PA, Lima MA, Guimera N, Clavero O, Alejo M, Llombart-Bosch A, Cheng-Yang C, Tatti SA, Kasamatsu E, Iljazovic E, Odida M, Prado R, Seoud M, Grce M, Usubutun A, Jain A, Suarez GA, Lombardi LE, Banjo A, Menendez C, Domingo EJ, Velasco J, Nessa A, Chichareon SC, Qiao YL, Lerma E, Garland SM, Sasagawa T, Ferrera A, Hammouda D, Mariani L, Pelayo A, Steiner I, Oliva E, Meijer CJ, Al-Jassar WF, Cruz E, Wright TC, Puras A, Llave CL, Tzardi M, Agorastos T, Garcia-Barriola V, Clavel C, Ordi J, Andujar M, Castellsague X, Sanchez GI, Nowakowski AM, Bornstein J, Munoz N, Bosch FX Human papillomavirus genotype attribution in invasive cervical cancer: a retrospective cross-sectional worldwide study. *Lancet Oncol.* 2010 Nov;11(11):1048-56. doi: 10.1016/S1470-2045(10)70230-8. Epub 2010 Oct 15.
110. Schneider BG, Peng DF, Camargo MC, Piazuolo MB, Sicinschi LA, Mera R, Romero-Gallo J, Delgado AG, Bravo LE, Wilson KT, Peek RM Jr, Correa P, El-Rifai W Promoter DNA hypermethylation in gastric biopsies from subjects at high and low risk for gastric cancer. *Int J Cancer.* 2010 Dec 1;127(11):2588-97. doi: 10.1002/ijc.25274.
111. Sicinschi LA, Correa P, Peek RM, Camargo MC, Piazuolo MB, Romero-Gallo J, Hobbs SS, Krishna U, Delgado A, Mera R, Bravo LE, Schneider BG CagA C-terminal variations in Helicobacter pylori strains from Colombian patients with gastric precancerous lesions. *Clin Microbiol Infect.* 2010 Apr;16(4):369-78. doi: 10.1111/j.1469-0691.2009.02811.x. Epub 2009 May 15.
112. Fischbach LA, Bravo LE, Zarama GR, Bravo JC, Ojha RP, Priest EL, Collazos T, Casabon AL, Guerrero LZ, Singh KP, Correa PA randomized clinical trial to determine the efficacy of regimens

- containing clarithromycin, metronidazole, and amoxicillin among histologic subgroups for *Helicobacter pylori* eradication in a developing country. *Helicobacter*. 2009 Apr;14(2):100-8. doi: 10.1111/j.1523-5378.2009.00667.x.
113. Piazuelo MB, Camargo MC, Mera RM, Delgado AG, Peek RM Jr, Correa H, Schneider BG, Sicinschi LA, Mora Y, Bravo LE, Correa P. Eosinophils and mast cells in chronic gastritis: possible implications in carcinogenesis. *Hum Pathol*. 2008 Sep;39(9):1360-9. doi: 10.1016/j.humpath.2008.01.012. Epub 2008 Jul 9.
114. Camargo MC, Burk RF, Bravo LE, Piazuelo MB, Hill KE, Fontham ET, Motley AK, Yopez MC, Mora Y, Schneider BG, Correa P. Plasma selenium measurements in subjects from areas with contrasting gastric cancer risks in Colombia. *Arch Med Res*. 2008 May;39(4):443-51. doi: 10.1016/j.arcmed.2007.12.004. Epub 2008 Mar 10.
115. Sicinschi LA, Correa P, Peek RM Jr, Camargo MC, Delgado A, Piazuelo MB, Romero-Gallo J, Bravo LE, Schneider BG. *Helicobacter pylori* genotyping and sequencing using paraffin-embedded biopsies from residents of Colombian areas with contrasting gastric cancer risks. *Helicobacter*. 2008 Apr;13(2):135-45. doi: 10.1111/j.1523-5378.2008.00554.x.
116. Camargo MC, Piazuelo MB, Mera RM, Fontham ET, Delgado AG, Yopez MC, Ceron C, Bravo LE, Bravo JC, Correa P. Effect of smoking on failure of *H. pylori* therapy and gastric histology in a high gastric cancer risk area of Colombia. *Acta Gastroenterol Latinoam*. 2007 Dec;37(4):238-45.
117. Bravo LE, Bravo JC, Realpe JL, Zarama G, Piazuelo MB, Correa P. [Source of variation in the diagnosis of *Helicobacter pylori*-associated multifocal atrophic gastritis.]. *Colomb Med (Cali)*. 2008 Jan;39(1):58-65.
118. Mera R, Fontham ET, Bravo LE, Bravo JC, Piazuelo MB, Camargo MC, Correa P. Re: long term follow up of patients treated for *Helicobacter pylori* infection. *Gut*. 2007 Mar;56(3):436. doi: 10.1136/gut.2006.108928.
119. Rodriguez RF, Bravo LE, Castro F, Montoya O, Castillo JM, Castillo MP, Daza P, Restrepo JM, Rodriguez MF. Incidence of weak opioids adverse events in the management of cancer pain: a double-blind comparative trial. *J Palliat Med*. 2007 Feb;10(1):56-60. doi: 10.1089/jpm.2006.0117.
120. Mera R, Fontham ET, Bravo LE, Bravo JC, Piazuelo MB, Camargo MC, Correa P. Re: Randomized double-blind factorial trial of three treatments to reduce the prevalence of precancerous gastric lesions. *J Natl Cancer Inst*. 2006 Oct 4;98(19):1426. doi: 10.1093/jnci/djj388.
121. Fontham ET, Correa P, Mera R, Bravo LE, Bravo JC, Piazuelo MB, Camargo MC. Duration of exposure, a neglected factor in chemoprevention trials. *Cancer Epidemiol Biomarkers Prev*. 2005 Nov;14(11 Pt 1):2465-6. doi: 10.1158/1055-9965.EPI-05-0518.
122. Mera RM, Correa P, Fontham EE, Reina JC, Pradilla A, Alzate A, Bravo LE. Effects of a new *Helicobacter pylori* infection on height and weight in Colombian children. *Ann Epidemiol*. 2006 May;16(5):347-51. doi: 10.1016/j.annepidem.2005.08.002. Epub 2005 Oct 24.
123. Mera R, Fontham ET, Bravo LE, Bravo JC, Piazuelo MB, Camargo MC, Correa P. Long term follow up of patients treated for *Helicobacter pylori* infection. *Gut*. 2005 Nov;54(11):1536-40. doi: 10.1136/gut.2005.072009. Epub 2005 Jun 28.
124. Whary MT, Sundina N, Bravo LE, Correa P, Quinones F, Caro F, Fox JG. Intestinal helminthiasis in Colombian children promotes a Th2 response to *Helicobacter pylori*: possible implications for gastric carcinogenesis. *Cancer Epidemiol Biomarkers Prev*. 2005 Jun;14(6):1464-9. doi: 10.1158/1055-9965.EPI-05-0095.
125. Correa P, Fontham E, Bravo LE, Mera R. Antioxidant supplements for prevention of gastrointestinal cancers. *Lancet*. 2005 Feb 5-11;365(9458):470; author reply 471-2. doi: 10.1016/S0140-6736(05)17856-8.

126. Du JX, Watkins T, Bravo LE, Fontham ET, Camargo MC, Correa P, Mera R13C-urea breath test for *Helicobacter pylori* in young children: cut-off point determination by finite mixture model. *Stat Med*. 2004 Jul 15;23(13):2049-60. doi: 10.1002/sim.1797.
127. Camargo MC, Yopez MC, Ceron C, Guerrero N, Bravo LE, Correa P, Fontham E. Age at acquisition of *Helicobacter pylori* infection: comparison of two areas with contrasting risk of gastric cancer. *Helicobacter*. 2004 Jun;9(3):262-70. doi: 10.1111/j.1083-4389.2004.00221.x.
128. Sicinschi LA, Correa P, Bravo LE, Schneider B. GBA positive assay for identification of cagA negative strains of *Helicobacter pylori*. *J Microbiol Methods*. 2003 Dec;55(3):625-33. doi: 10.1016/s0167-7012(03)00206-9.
129. Bravo LE, Mera R, Reina JC, Pradilla A, Alzate A, Fontham E, Correa P. Impact of *Helicobacter pylori* infection on growth of children: a prospective cohort study. *J Pediatr Gastroenterol Nutr*. 2003 Nov;37(5):614-9. doi: 10.1097/00005176-200311000-00021.
130. Silva F, Carvalho F, Peixoto A, Teixeira A, Almeida R, Reis C, Bravo LE, Realpe L, Correa P, David LM. UIC1 polymorphism confers increased risk for intestinal metaplasia in a Colombian population with chronic gastritis. *Eur J Hum Genet*. 2003 May;11(5):380-4. doi: 10.1038/sj.ejhg.5200978.
131. Bedoya A, Garay J, Sanzon F, Bravo LE, Bravo JC, Correa H, Craver R, Fontham E, Du JX, Correa P. Histopathology of gastritis in *Helicobacter pylori*-infected children from populations at high and low gastric cancer risk. *Hum Pathol*. 2003 Mar;34(3):206-13. doi: 10.1053/hupa.2003.43.
132. Sicinschi LA, Correa P, Bravo LE, Schneider B. G. Detection and typing of *Helicobacter pylori* cagA/vacA genes by radioactive, one-step polymerase chain reaction in stool samples from children. *J Microbiol Methods*. 2003 Feb;52(2):197-207. doi: 10.1016/s0167-7012(02)00158-6.
133. Bravo LE, van Doorn LJ, Realpe JL, Correa P. Virulence-associated genotypes of *Helicobacter pylori*: do they explain the African enigma? *Am J Gastroenterol*. 2002 Nov;97(11):2839-42. doi: 10.1111/j.1572-0241.2002.07031.x.
134. Ruiz B, Garay J, Correa P, Fontham ET, Bravo JC, Bravo LE, Realpe JL, Mera R. Morphometric evaluation of gastric antral atrophy: improvement after cure of *Helicobacter pylori* infection. *Am J Gastroenterol*. 2001 Dec;96(12):3281-7. doi: 10.1111/j.1572-0241.2001.05326.x.
135. Fischbach LA, Correa P, Ramirez H, Realpe JL, Collazos T, Ruiz B, Bravo LE, Bravo JC, Casabon AL, Schmidt B. A. Anti-inflammatory and tissue-protectant drug effects: results from a randomized placebo-controlled trial of gastritis patients at high risk for gastric cancer. *Aliment Pharmacol Ther*. 2001 Jun;15(6):831-41. doi: 10.1046/j.1365-2036.2001.00998.x.
136. Nogueira C, Figueiredo C, Carneiro F, Gomes AT, Barreira R, Figueira P, Salgado C, Belo L, Peixoto A, Bravo JC, Bravo LE, Realpe JL, Plaisier AP, Quint WG, Ruiz B, Correa P, van Doorn LJ. *Helicobacter pylori* genotypes may determine gastric histopathology. *Am J Pathol*. 2001 Feb;158(2):647-54. doi: 10.1016/s0002-9440(10)64006-0.
137. Correa P, Fontham ET, Bravo JC, Bravo LE, Ruiz B, Zarama G, Realpe JL, Malcom GT, Li D, Johnson WD, Mera R. Chemoprevention of gastric dysplasia: randomized trial of antioxidant supplements and anti-*Helicobacter pylori* therapy. *J Natl Cancer Inst*. 2000 Dec 6;92(23):1881-8. doi: 10.1093/jnci/92.23.1881.
138. Correa P, van Doorn LJ, Bravo JC, Ruiz B, Bravo LE, Realpe JL. Unsuccessful treatment results in survival of less virulent genotypes of *Helicobacter pylori* in Colombian patients. *Am J Gastroenterol*. 2000 Feb;95(2):564-6. doi: 10.1111/j.1572-0241.2000.t01-1-01813.x.
139. Bravo LE, Realpe JL, Campo C, Mera R, Correa P. Effects of acid suppression and bismuth medications on the performance of diagnostic tests for *Helicobacter pylori* infection. *Am J Gastroenterol*. 1999 Sep;94(9):2380-3. doi: 10.1111/j.1572-0241.1999.01361.x.

140. Mera R, Realpe JL, Bravo LE, DeLany JP, Correa P Eradication of Helicobacter pylori infection with proton pump-based triple therapy in patients in whom bismuth-based triple therapy failed. *J Clin Gastroenterol.* 1999 Jul;29(1):51-5. doi: 10.1097/00004836-199907000-00013.
141. Correa P, Malcom G, Schmidt B, Fontham E, Ruiz B, Bravo JC, Bravo LE, Zarama G, Realpe JL Review article: Antioxidant micronutrients and gastric cancer. *Aliment Pharmacol Ther.* 1998 Feb;12 Suppl 1:73-82. doi: 10.1111/j.1365-2036.1998.00006.x.
142. Mannick EE, Bravo LE, Zarama G, Realpe JL, Zhang XJ, Ruiz B, Fontham ET, Mera R, Miller MJ, Correa P Inducible nitric oxide synthase, nitrotyrosine, and apoptosis in Helicobacter pylori gastritis: effect of antibiotics and antioxidants. *Cancer Res.* 1996 Jul 15;56(14):3238-43.