Biographical sketch and personal statement

# Lawrence B. Faulkner, M.D.

Title: Medical Advisory Board Coordinator, Cure2Children Foundation

Specialty: Pediatric hematology-oncology and stem cell transplantation

Born August 3, 1958

Citizenship: Italy and UK

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# Education

Medical Doctor Degree: University of Florence, Italy, 1983 (110/110 cum laude).

Pediatric Residency: Long Island College Hospital, Brooklyn NY, 1986-89.

Pediatric Hematology-Oncology Fellowship: Memorial Sloan Kettering Cancer Center - New York Hospital, New York NY, Cornell University Medical School combined program, 1989-92.

## **International memberships**

International Society of Pediatric Oncology

American Society of Hematology

American Society of Clinical Oncology

# **Other qualifications**

JACIE (Joint Accreditation Commitee ISCT-EBMT) Inspector

# Work experience

1990-1992 Pediatric Fellow in the laboratory of Developmental Hematology directed by Malcolm A. S. Moore Ph.D., Memorial Sloan Kettering Cancer Center, NY, USA.

1992-1993 Pediatric Hematology-Oncology attending at the Catholic University Medical Center (Policlinico Gemelli) in Rome, Italy.

1994-2005 Pediatric Hematology-Oncology attending at the Children's Hospital of Florence (Ospedale Meyer).

2006-present. Medical Coordinator of the Cure2Children Foundation.

2015 Program Director, Sankalp-People Tree Hospitals Bone Marrow Transplant Unit, Bangalore, India.

# **Research Grants and Awards**

1995 Principal investigator of a three-year "Seed Grant" by the Italian Cancer Research Association. Total funds: 90,000 Euros.

1997 Principal investigator of a four-year research project by the Italian Neuroblastoma Research Association on minimal residual disease analysis of neuroblastoma. Total funds: 80,000 Euros.



2001 Principal investigator of a four-year research support by the Tommasino Bacciotti Foundation on the use of stem cell transplantation for the cure of high-risk brain tumors and other pediatric malignancies. Total funds: 200,000 Euros.

2002 Coordinator of the Marrow Disease Evaluation Subcommittee of the Neuroblastoma Group of the International Society of Pediatric Oncology (SIOP).

2007 Founder and Advisory Board Coordinator of the Cure2Children Foundation

2008 Principal investigator for a two-year grant from the *Fondazione Monte dei Paschi di Siena*, Italy, to support a network of centers offering the cure for thalassemic children in Pakistan. Total funds: 150,000 Euros.

2010 Principal investigator for a one-year grant from the *Fondazione Monte dei Paschi di Siena*, Italy, on the support for sustainable cure and prevention of thalassemia in India through social entrepreneurship initiatives. Total funds: 20,000 Euros.

2010 Coordinator of a two-year grant for a Global Neuroblastoma Database module within the St Jude's Hospital Outreach Program Pediatric Oncology Network Database by the *Fondazione Umberto Veronesi*, Italy. Total funds: 122,000 Euros.

2010 Coordinator of a four-year grant of 85,000,000 Pakistani rupees (~750,000 Euros) from the Pakistani-Italian Dept-for-development Swap Agreement for a project on the cure and prevention of thalassemia in Pakistan.

2014 Coordinator of a two-year grant for the consolidation of the Global Neuroblastoma Network by the *Fondazione Umberto Veronesi*, Italy. Total funds: 50,000 Euros.

## Meeting presentations 2013-2015

**Faulkner L.**, Marwah P., Yaqub N., Soni R., Khalid S., Itrat F., Gilani Khan S., et al. ATG vs. Thiotepa in addition to BuCy for low-risk BMT in severe thalassemia. Oral presentation at the *41st Annual Meeting of the European Society for Blood and Marrow Transplantation*, March 24, 2015, Istanbul, Turkey, www.ebmt2015.org.

**Faulkner L.**, Thalassemia. 41<sup>st</sup> Annual Meeting of the European Society for Blood and Marrow Transplantation, March 23, 2015, Istanbul, Turkey, www.ebmt2015.org

**Faulkner L.**, Stem cell transplantation for sickle cell disease in developing countries. 41<sup>st</sup> Annual Meeting of the European Society for Blood and Marrow Transplantation, 2015 March 23, 2015, Istanbul, Turkey, www.ebmt2015.org.

Agarwal RK, Sedai A, Dhinal S, El Missiry M, Agarwal A, Siddique S, Clemente L, Khalid S, Yaqub N, Marwah P, Soni R, Itrat F, Khan Gilani S, Hussain MH, Khan A, Uderzo C and **Faulkner L**. Hematopoietic Stem Cell Transplantation Quality Management Support Through a Dedicated Web-Based Application. Oral presentation at the *40th Annual Meeting of the European Society for Blood and Marrow Transplantation*, Milan, Italy, April 1, 2014.

Khalid S, Yaqub N, Marwah P, Soni R, Itrat F, Khan A, Khan Gilani S, El Missiry M, Hussain MH, Uderzo C and **Faulkner L**. Improved Engraftment and Transfusion Independency after Cyclosporin Withdrawal in Patients with Mixed Chimersim after Matched Sibling Transplant for Thalassemia Major. Poster presentation at the *40th Annual Meeting of the European Society for Blood and Marrow Transplantation*, Milan, Italy, April 1, 2014.

**Faulkner, L.** Establishment of Low Cost, Full–Fledged BMT Units. To be Presented at the *13th International Conference on Thalassaemia & Haemoglobinopathies*, Abu Dhabi, UAE, October 22, 2013.

Faulkner, L. Bone Marrow Transplantation in Hemoglobinopathies. To be presented at the Hematology 2013, *III Caribbean Conference on Sickle Cell Disease*, La Habana, Cuba, May 22, 2013.

**Faulkner, L.** Transplantation in the 'New Thalassemia Era' Has BMT Improved as Much as Chelation? How Will It Relate to Gene Therapy? Presented at the *14th International Thalassemia Conference, Cairo, Egypt*, May 8, 2013.

Faulkner, L. The Experience of the Cure2Children Foundation in Thalassemia Prevention. presented at the *14th International Thalassemia Conference, Cairo, Egypt*, May 9, 2013.

**Faulkner L**, Hussain MH, El Missiry M, Khalid S, Yaqub N, Khan Gilani S, Fatima I, et al. Online and On-site Focused Training to Launch New BMT Services in Emerging Countries: Summary of Outcomes and Costs. presented at the *39th Annual Meeting of the European Group for Blood and Marrow Transplantation, London, UK*, April 2013.

Mehta, PA and **Faulkner L**. Hematopoietic Cell Transplantation for Thalassemia: A Global Perspective. Presented at the Annual Meeting of the American Society for Blood and Marrow Transplantation and the Center for International Bl.ood and Marrow Transplantation Research (BMT Tanden Meetings), Salt Lake City, USA, February 14, 2013.

#### **Full-text scientific publications**

#### (Citation index)

Parikh, N.S., Howard S.C., Chantada G., Israels T., Khattab M., Alcasabas P., Lam C.G., **Faulkner L.**, Park J.R., London W.B., Matthay K.K.: SIOP-PODC Recommended Graduated Intensity Guidelines for Diagnosis, Risk Stratification and Treatment of Neuroblastoma in Resource-Limited Countries. *Pediatric Blood & Cancer* in press, (2015).

**Faulkner, L.** A global response to a global problem: The rising burden of hemoglobinopathies. *Blood and Cancer Secrets* 2, 7–13 (2014).

El Missiry M., Hamed Hussein M, Khalid S., Yaqub N., Khan S., Fatima I., Uderzo C., and **Faulkner L**. Assessment of Serum Zinc Levels of Patients with Thalassemia Compared to Their Siblings. *Anemia* 2014 (August 14, 2014): e125452. doi:10.1155/2014/125452.

**Faulkner L.** Hematopietic Stem Cell Transplantation for Thalassemia, Price and Prejudice. In *Thalassemia: Causes, Treatment Options and Long-Term Health Outcomes*, 71–81. Recent Advances in Hematology Research. Makenzie Greene, 2014.

Agarwal R.K., Sedai A., Dhinal S., Agarwal A., Clemente L., Siddique S., Yaqub N., Khalid S., Itrat F., Khan A., Gilani, S.K., Marwah P, Soni R., El Missiry M, Hussain M.H., Uderzo C. and **Faulkner L**. A Prospective International Cooperative Information Technology Platform Built Using Open-Source Tools for Improving the Access to and Safety of Bone Marrow Transplantation in Low- and Middle-Income Countries. *Journal of the American Medical Informatics Association: JAMIA* 2014, doi:10.1136/amiajnl-2013-002594.

Yaqub N., Khalid S., Fatima I., Khan A., Khan Gilani S., El Missiry M., Hussain M.H., Uderzo C., and **Faulkner L.** Second Bone Marrow Transplantation for Thalassemia Major Using Post-Transplant Cyclophosphamide. *Bone Marrow Transplantation*, 49:845-846, 2014.

**Faulkner L.**, C. Uderzo, and G. Masera. International Cooperation for the Cure and Prevention of Severe Hemoglobinopathies. *Journal of Pediatric Hematology/Oncology* 35(6):419-23, 2013.

**Faulkner L.** Setting up Bone Marrow Transplantation for Children with Thalassemia May Facilitate Pediatric Cancer Care. *South Asian Journal of Cancer* 2:109-112, 2013.

El Missiry M. and **Faulkner L.** Thalassemia, *St Jude Children's Research Hospital, Cure4Kids Oncopedia*, May 2013

Mehta, PA and **Faulkner L**. Hematopoietic Cell Transplantation for Thalassemia: A Global Perspective. *Biology of Blood and Marrow Transplantation*: Journal of the American Society for Blood and Marrow Transplantation 19(1 Suppl) 2013: S70–3, 2013.

Hussein, MH, El Missiry M, Khalid S, Yaqub N, Khan Gilani S, Fatima I, Zara T, Marwah P, Soni, R, Bernard F, Manna N, Uderzo C and **Faulkner L**. Bone Marrow Transplantation for Thalassemia: a Global Perspective. *Thalassemia Reports* 3:103–107, 2013. doi:10.4081/thal.2013.s1.e42.

**Faulkner L**, Yaqub N, Khalid S, Zhara T, Ansari S, Farzana T, Shamsi T: Transplantation in low resource countries. *Thalassemia Reports* 1:30-33, 2011, doi:10.4081/thal.2011.s2.e9

Sodani P, Isgrò A, Gaziev J, Polchi P, Paciaroni K, Marziali M, Simone MD, Roveda A, Montuoro A, Alfieri C, De Angelis G, Gallucci C, Erer B, Isacchi G, Zinno F, Adorno G, Lanti A, **Faulkner** L, Testi M, Andreani M, and Lucarelli G: Purified T-depleted, CD34+ peripheral blood and bone marrow cell transplantation from haploidentical mother to child with thalassemia. *Blood* 115 (6):1296-1302, 2010

Corrias MV, Parodi S, Haupt R, Lacitignola L, Negri F, Sementa AR, Dau D, Scuderi F, Carlini B, Bianchi M, Casale F, **Faulkner L**, Garaventa A. Detection of GD2 positive cells in bone marrow samples and survival of patients with localized neuroblastoma. *Br J Cancer*. 98 (2): 263-269, 2008.

Iannalfi A, Bambi F, Tintori V, Lacitignola L, Bernini G, Mariani MP, Sanvito MC, Pagliai F, Brandigi F, Muscarella E, Tapinassi F, and **Faulkner L**. Peripheral blood progenitor uncontrolled-rate freezing: a single pediatric center experience. *Transfusion*. 47 (12):2202-2206, 2007.

Corrias MV, **Faulkner LB**, Pistorio A, Rosanda C, Callea F, Piccolo MS, Scaruffi P, Marchi C, Lacitignola L, Occhino M, Gambini C, Tonini GP, Haupt R, De Bernardi B, Pistoia V, and Garaventa A. Detection of neuroblastoma cells in bone marrow and peripheral blood by different techniques: accuracy and relationship with clinical features of patients. *Clin.Cancer Res.* 10 (23):7978-7985, 2004.

Bambi F, Fontanazza S, Messeri A, Lippi A, Tucci F, Tamburini A, Tintori V, Casini T, Lacitignola L, Tondo A, Veltroni M, BerniniG, and **Faulkner LB**. Use of percutaneous radial artery catheter for peripheral blood progenitor cell collection in pediatric patients. *Transfusion* 43 (2):254-258, 2003.

Jayne D, Passweg J, Marmont A, Farge d, Khao X, Arnold R, Hiepe F, Lisukov I, Musso M, Ou-Yang J, Marsh J, Wulffraat N, Besalduch J, Bingham SJ, Emery P, Brune M, Fassas A, **Faulkner** L, Ferster A, Fiehn C, Fouillard I, Geromin A, Greinix H, Rabusin M, Saccardi R, Scheneider P, Zintl F, Gratwohl A, and Tyndall A. Autologous stem cell transplantation for Systemic Lupus Erythematosus. *Lupus* 13 (3):168-176, 2004.

Pagani A, Macri L, **Faulkner LB**, Tintori V, Paoli A, Garaventa A, and bussolanti G. Detection procedures for neuroblastoma cells metastatic to blood and bone marrow: blinded comparison of chromogranin A heminested reverse transcription polymerase chain reaction to tyrosine hydroxylase nested reverse transcription polymerase chain reaction and to anti-GD2 immunocytology. *Diagn.Mol.Pathol.* 11 (2):98-106, 2002.

Sardi I, Tintori V, Marchi C, Veltroni M, Lippi A, Tucci F, Tamburini A, Bernini G, and **Faulkner** L. Molecular profiling of high-risk neuroblastoma by cDNA array. *Int.J Mol.Med* 9 (5):541-545, 2002.

**Faulkner LB**, Garaventa A, Paoli A, Tintori V, Tamburini A, Lacitignola L, Veltroni M, Lo Piccolo MS, Viscardi E, Milanaccio C, Tondo A, Spinelli S, Bernini G, and De Bernardi B. *In vivo* 

cytoreduction studies and cell-sorting enhanced tumor cell detection in high-risk neuroblastoma patients: implications for leukapheresis strategies. *J Clin Oncol* 18(22):3829-3836, 2000.

Pession A, Rondelli R, Paolucci P, Pastore G, Dini G, Bonetti F, Madon E, Mandelli F, Zanesco L, Uderzo C, Prete A, Rabusin M, Ugazio A, Di Bartolomeo P, Favre C, **Faulkner L**, Poggi V, Luksch R, Donfrancesco A, Argiolu F, La Nasa G, Amici A, and Locatelli F. Hematopoietic stem cell transplantation in childhood: report from the bone marrow transplantation group of the Associazione Italiana Ematologia Oncologia Pediatrica (AIEOP).*Haematologica* 85(6):638-646, 2000.

van den Oudenrijn S, Bruin M, Folman CC, Peters M, **Faulkner LB**, de Haas M, and von dem Borne AE. Mutations in the thrombopoietin receptor, Mpl, in children with congenital amegakaryocytic thrombocytopenia. *Br J Hematol* 110(2):441-448, 2000.

Bambi F, **Faulkner LB**, Azzari C, Gelli AMG, Tamburini A, Tintori V, Lippi AA, Tucci F, Bernini G, Genovese F. Pediatric peripheral blood progenitor collection: Haemonetics MCS 3p vs COBE Spectra vs Fresenius AS 104. *Transfusion* 1998;38:70-74.

**Faulkner LB**, Tucci F, Tamburini A, Tintori V, Lippi A, Bambi F, Malentacca F, Azzari C, Gelli AMG, Genovese F, Bernini G. G-CSF serum pharmacokinetics during peripheral blood progenitor cell mobilization: neutrophil count-adjusted dosage might potentially improve mobilization and be more cost-effective. *Bone Marrow Transplant* 1998;21:1091-1095.

**Faulkner LB**, Tintori V, Tamburini A, Paoli A, Garaventa A, Viscardi E, Tucci F, Lippi A, De Bernardi B, Bernini G. High-sensitivity immunocytological analysis of concomitant blood and marrow tumor cell distribution in neuroblastoma. *J Hematother* 1998;7:361-366.

**Faulkner LB**, Tamburini A, Tintori V, Paoli A, Tondo A, Bernini G, Medicina D, Brisigotti M, Corrias MV, Scaruffi P, Rosanda C, Lo Piccolo MS, Viscardi E, Milanaccio C, Garaventa A, De Bernardi B. Detection of minimal residual disease in bone marrow and peripheral blood in neuroblastoma. Prognostic and therapeutic implications. *Med Surg Ped* 1998;20:175-178.

**Faulkner LB**, Lindsley KL, Kher U, Heller G, Black P, Finlay JL. High-dose chemotherapy with autologous marrow rescue for malignant brain tumors: analysis of the impact of prior chemotherapy and cranio-spinal radiation on hematopoietic recovery. *Bone Marrow Transplant* 1996;17:389-394.

**Faulkner LB**, Hajdu SI, Kher U, La Quaglia M, Exelby PR, Heller G, Wollner N. Pediatric desmoid tumor: retrospective analysis of 63 cases. *J Clin Oncol* 1995;13:2813-2818.

Pini G, Faulkner LB. Cerebellar involvement in hypomelanosis of Ito. *Neuropediatrics* 1995;26:208-210.

**Faulkner LB**, Finlay JL. Towards a better definition of risk-group-tailored treatment in medulloblastoma. A review of seven reports on data obtained in the computerized tomographic imaging era. *Crit Rev Neurosurg* 1994;4:13-23.

Gillio AP, **Faulkner LB**, Alter BP, Reilly L, Klafter R, Heller G, Young D, Lipton JM, Moore MAS, O'Reilly RJ. Succesful treatment of Diamond-Blackfan anemia with interleukin 3. *Stem Cells* 1993;11 (suppl 2):123-130.

Gillio AP, **Faulkner LB**, Alter BP, Reilly L, Klafter R, Heller G, Young DC, Lipton JM, Moore MAS, O'Reilly RJ. Treatment of Diamond-Blackfan Anemia with recombinant human interleukin-3. *Blood* 1993;82:744-751.

#### Other recognitions

An entire chapter dedicated to Cure2Children on Nobel Prize Professor Muhammad Yunus's book "Building Social Business: The New Kind of Capitalism That Serves Humanity's Most Pressing Needs". Chapter 4: "To Cure One Child". 2010, ISBN 978-1-58648-824-6 (hardcover).

#### **Personal statement**

After working for almost 20 years in affluent counties as a pediatrician specialized in childhood cancer and blood disorders, I decided to dedicate myself full-time to international medicine. For the past 8 years I have collaborated with professionals and institutions in developing countries committed to the cure of children with cancer and severe hematological diseases. Since then this has become my primary professional objective, more at <u>www.cure2children.org</u>. I am very proud to have contributed to the start up of 7 BMT units in Pakistan, India, Sri Lanka and Morocco as well as to the treatment of children with malignancies directly in Kosovo and Georgia.