



L. Henry Goodnough, MD, PhD

Assistant Professor of Orthopaedic Surgery

CLINICAL OFFICES

- **Orthopaedic Surgery**

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ACADEMIC CONTACT INFORMATION

- **Alternate Contact**

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Bio

BIO

Dr. Goodnough is an orthopaedic surgeon who is fellowship-trained in orthopaedic traumatology. This specialty is dedicated to the care of patients with complex injuries to the body's bones, joints, or tissues.

Dr. Goodnough is a clinical instructor of orthopaedic surgery. He also holds a PhD degree, and his doctoral research focused on genetic mechanisms of early bone development.

For each patient, he develops a personalized plan of care. His goals are to treat the patient's injury, restore function, and help promote the best possible quality of life. His clinical interests include nonunions, periarticular fractures, fractures of the pelvis and acetabulum, and infections.

Dr. Goodnough has conducted research on the role of skeletal stem cells in fracture healing. He also has investigated how cells function in fractures that have failed to heal ("nonunions").

He has co-authored articles on his research discoveries in the Journal of the American Academy of Orthopaedic Surgery, Journal of Orthopaedic Trauma, Journal of Bone and Mineral Research, and elsewhere. Topics include advances in surgical technique and technology.

He also has contributed to chapters in the textbooks Surgery of the Hip, Skeletal Trauma of the Upper Extremity, and Operative Techniques in Orthopedic Trauma.

Dr. Goodnough has presented the findings of his research at numerous national and regional conferences. They include meetings of the Orthopaedic Trauma Association, American Academy of Orthopaedic Surgeons, and Western Orthopaedic Association. Topics have included the effects of non-steroidal anti-inflammatory drugs on skeletal stem cells in fractures.

Dr. Goodnough is a member of the American Academy of Orthopaedic Surgeons, Orthopaedic Trauma Association, and AO, the global network of doctors dedicated to the surgical treatment of trauma and musculoskeletal disorders.

CLINICAL FOCUS

- Orthopaedic Trauma
- Orthopaedic Surgery

ACADEMIC APPOINTMENTS

- Assistant Professor - University Medical Line, Orthopaedic Surgery

HONORS AND AWARDS

- Recipient, Orthopaedic Summit Resident Travel Grant
- What's New in Musculoskeletal Basic Science, Journal of Bone and Joint Surgery "Orthobuzz"
- Resident Award, Western Orthopaedic Association Annual Meeting
- Recipient, Depuy Synthes Travel Grant
- Recipient, Foundations Orthopedic Trauma Travel Grant
- Intern of the Year, Stanford Department of Vascular Surgery
- Member, Alpha Omega Alpha Honors Society
- Recipient, Doctoral Excellence Award in Pathology
- Recognition, Graduate School, Case Western Reserve University School of Medicine (4.0 Cumulative GPA)
- Representative, Case Western Reserve University Medical Science Training Program, National MD/PhD Conference
- Finalist, Lindau Laureates
- Best Poster, Musculoskeletal Research Day, Case Western Reserve University School of Medicine
- Best Poster, MSTP Winter Retreat, Case Western Reserve University School of Medicine
- Participant, National Institutes of Health Medical Scientist Training Program

PROFESSIONAL EDUCATION

- Fellowship: Harborview Medical Center (2021) WA
- Residency: Stanford University Orthopaedic Surgery Residency (2020) CA
- Medical Education: Case Western Reserve School of Medicine (2015) OH

Publications

PUBLICATIONS

- **Supplemental medial small fragment fixation adds stability to distal femur fixation: A biomechanical study.** *Injury*
Henry Goodnough, L., Salazar, B. P., Chen, M. J., Storaci, H., Guzman, R., Heffner, M., Tam, K., DeBaun, M. R., Gardner, M. J.
2021
- **Indications for cement augmentation in fixation of geriatric intertrochanteric femur fractures: a systematic review of evidence.** *Archives of orthopaedic and trauma surgery*
Goodnough, L. H., Wadhwa, H., Tigchelaar, S. S., DeBaun, M. R., Chen, M. J., Graves, M. L., Gardner, M. J.
2021
- **White-Light Body Scanning Captures Three-Dimensional Shoulder Deformity After Displaced Diaphyseal Clavicle Fracture.** *Journal of orthopaedic trauma*
DeBaun, M. R., Lai, C., Schultz, B. J., Oquendo, Y. A., Campbell, S. T., Goodnough, L. H., Bishop, J. A., Gardner, M. J.
2021; 35 (4): e142–e147

- **Medial Column Support in Pilon Fractures Using Percutaneous Intramedullary Large Fragment Fixation.** *Journal of orthopaedic trauma*
Goodnough, L. H., Tigchelaar, S. S., Van Rysselberghe, N. L., DeBaun, M. R., Gardner, M. J., Hecht, G. G., Lucas, J. F.
2021
- **Cephalomedullary helical blade is independently associated with less collapse in intertrochanteric femur fractures than lag screws.** *European journal of orthopaedic surgery & traumatology : orthopedie traumatologie*
Goodnough, L. H., Wadhwa, H., Tigchelaar, S. S., Pfaff, K., Heffner, M., Van Rysselberghe, N., DeBaun, M. R., Bishop, J. A., Gardner, M. J.
2021
- **Short versus long cephalomedullary nailing of intertrochanteric fractures: a meta-analysis of 3208 patients.** *Archives of orthopaedic and trauma surgery*
Cinque, M. E., Goodnough, L. H., Md, B. J., Fithian, A. T., DeBaun, M. n., Lucas, J. F., Md, M. J., Bishop, J. A.
2021
- **Incidence and Management of Articular Impaction in Geriatric Olecranon Fractures.** *The Journal of the American Academy of Orthopaedic Surgeons*
Wadhwa, H. n., Goodnough, L. H., Finlay, A. K., DeBaun, M. R., Campbell, S. T., Hecht, G. n., Lucas, J. F., Bishop, J. A., Gardner, M. J.
2021
- **Distal Femur Replacement versus Open Reduction and Internal Fixation for Treatment of Periprosthetic Distal Femur Fractures: Systematic Review and Meta-Analysis.** *Journal of orthopaedic trauma*
Wadhwa, H. n., Salazar, B. P., Goodnough, L. H., Van Rysselberghe, N. L., DeBaun, M. R., Wong, H. N., Gardner, M. J., Bishop, J. A.
2021
- **Lateral Distractor Use During Internal Fixation of Tibial Plateau Fractures Has Minimal Risk of Iatrogenic Peroneal Nerve Palsy.** *Journal of orthopaedic trauma*
Chen, M. J., Salazar, B. P., Tigchelaar, S. S., Frey, C. S., DeBaun, M. R., Goodnough, L. H., Bellino, M. J., Bishop, J. A., Gardner, M. J.
2020
- **Delayed Union of a Diaphyseal Forearm Fracture Associated With Impaired Osteogenic Differentiation of Prospectively Isolated Human Skeletal Stem Cells.** *JBMR plus*
Goodnough, L. H., Ambrosi, T. H., Steininger, H., DeBaun, M. R., Abrams, G. D., McAdams, T. R., Gardner, M. J., Chan, C. K., Bishop, J. A.
2020; 4 (10): e10398
- **Human skeletal stem cell aging.** *Aging*
Ambrosi, T. H., Goodnough, L. H., Chan, C. K.
2020
- **Distal Femur Replacement versus Surgical Fixation for the Treatment of Geriatric Distal Femur Fractures: A Systematic Review.** *Journal of orthopaedic trauma*
Salazar, B. P., Babian, A. R., DeBaun, M. R., Githens, M. F., Chavez, G. A., Goodnough, H., Gardner, M. J., Bishop, J. A.
2020
- **Geriatric fragility fractures are associated with a human skeletal stem cell defect.** *Aging cell*
Ambrosi, T. H., Goodnough, L. H., Steininger, H. M., Hoover, M. Y., Kim, E., Koepke, L. S., Marecic, O., Zhao, L., Seita, J., Bishop, J. A., Gardner, M. J., Chan, C. K.
2020: e13164
- **Complication Rates after Lateral Plate Fixation of Periprosthetic Distal Femur Fractures: A Multicenter Study.** *Injury*
Campbell, S. T., Lim, P. K., Kantor, A. H., Gausden, E. B., Goodnough, L. H., Park, A. Y., Bishop, J. A., Achor, T. S., Scolaro, J. A., Gardner, M. J.
2020
- **How do pilon fractures heal? An analysis of dual plating and bridging callus formation.** *Injury*
Campbell, S. T., Goodnough, L. H., Salazar, B., Lucas, J. F., Bishop, J. A., Gardner, M. J.
2020
- **Selective screw fixation is associated with early failure of primary acetabular components for aseptic loosening.** *Journal of orthopaedic research : official publication of the Orthopaedic Research Society*
Henry Goodnough, L., Bonano, J. C., Finlay, A. K., Aggarwal, V., Huddleston, J. I., Maloney, W. J., Goodman, S. B., Amanatullah, D. F.
2020
- **Is percutaneous screw fixation really superior to non-operative management after valgus-impacted femoral neck fracture: a retrospective cohort study.** *European journal of orthopaedic surgery & traumatology : orthopedie traumatologie*

- Goodnough, L. H., Wadhwa, H. n., Fithian, A. T., DeBaun, M. R., Campbell, S. T., Gardner, M. J., Bishop, J. A.
2020
- **Trochanteric fixation nail advanced with helical blade and cement augmentation: early experience with a retrospective cohort.** *European journal of orthopaedic surgery & traumatology : orthopedie traumatologie*
Goodnough, L. H., Wadhwa, H. n., Tigchelaar, S. S., DeBaun, M. R., Chen, M. J., Bishop, J. A., Gardner, M. J.
2020
 - **How are peri-implant fractures below short versus long cephalomedullary nails different?** *European journal of orthopaedic surgery & traumatology : orthopedie traumatologie*
Goodnough, L. H., Salazar, B. P., Furness, J. n., Feng, J. E., DeBaun, M. R., Campbell, S. T., Lucas, J. F., Cross, W. W., Leucht, P. n., Grant, K. D., Gardner, M. J., Bishop, J. A.
2020
 - **Metaphyseal callus formation in pilon fractures is associated with loss of alignment: Is stiffer better?** *Injury*
Van Rysselberghe, N. L., Campbell, S. T., Goodnough, L. H., Salazar, B. P., Bishop, J. A., Bellino, M. J., Lucas, J. F., Gardner, M. J.
2020
 - **Dual Mini-Fragment Plating is Comparable to Precontoured Small Fragment Plating for Operative Diaphyseal Clavicle Fractures: A Retrospective Cohort Study.** *Journal of orthopaedic trauma*
DeBaun, M. R., Chen, M. J., Campbell, S. T., Goodnough, L. H., Lai, C., Salazar, B. P., Bishop, J. A., Gardner, M. J.
2019
 - **Rates of Perioperative Complications Among Patients Undergoing Orthopedic Trauma Surgery Despite Having Positive Results for Methamphetamine** *ORTHOPEDICS*
Githens, T., DeBaun, M. R., Campbell, S. T., Wu, E. J., Goodnough, L., Lichstein, P., Painter, C., Krygier, J. E., Bishop, J., Gardner, M. J.
2019; 42 (4): 192–96
 - **Changing practice patterns: flexed versus semi-extended positioning for tibial nailing** *CURRENT ORTHOPAEDIC PRACTICE*
Goodnough, L., Campbell, S. T., Githens, M. F., Gardner, M. J., Bishop, J. A.
2019; 30 (4): 356–60
 - **Geriatric olecranon fractures treated with plate fixation have low complication rates** *CURRENT ORTHOPAEDIC PRACTICE*
Campbell, S. T., DeBaun, M. R., Goodnough, L., Bishop, J. A., Gardner, M. J.
2019; 30 (4): 353–55
 - **Decreased estimated blood loss in lateral trans-psoas versus anterior approach to lumbar interbody fusion for degenerative spondylolisthesis.** *Journal of spine surgery (Hong Kong)*
Goodnough, L. H., Koltsov, J., Wang, T., Xiong, G., Nathan, K., Cheng, I.
2019; 5 (2): 185–93
 - **Identification of the Human Skeletal Stem Cell** *CELL*
Chan, C. F., Gulati, G. S., Sinha, R., Tompkins, J., Lopez, M., Carter, A. C., Ransom, R. C., Reinisch, A., Wearda, T., Murphy, M., Brewer, R. E., Koepke, L. S., Marecic, et al
2018; 175 (1): 43-+
 - **Obesity Is Independently Associated With Early Aseptic Loosening in Primary Total Hip Arthroplasty** *JOURNAL OF ARTHROPLASTY*
Goodnough, L. H., Finlay, A. K., Huddleston, J. I., Goodman, S. B., Maloney, W. J., Amanatullah, D. F.
2018; 33 (3): 882–86
 - **Antiseptics Commonly Used in Total Joint Arthroplasty Interact and May Form Toxic Products** *JOURNAL OF ARTHROPLASTY*
Campbell, S. T., Goodnough, L. H., Bennett, C. G., Giori, N. J.
2018; 33 (3): 844–46
 - **Blood Transfusion Therapy.** *Medical clinics of North America*
Goodnough, L. T., Panigrahi, A. K.
2017; 101 (2): 431-447
 - **Management of anemia in patients with congestive heart failure** *AMERICAN JOURNAL OF HEMATOLOGY*
Goodnough, L. T., Comin-Colet, J., Leal-Noval, S., Ozawa, S., Takere, J., Henry, D., Javidrooz, M., Hohmuth, B., Bisbe, E., Gross, I., Shander, A.
2017; 92 (1): 88-93

- **"Simplified International Recommendations for the Implementation of Patient Blood Management" (SIR4PBM).** *Perioperative medicine (London, England)*
Meybohm, P., Froessler, B., Goodnough, L. T., Klein, A. A., Muñoz, M., Murphy, M. F., Richards, T., Shander, A., Spahn, D. R., Zacharowski, K.
2017; 6: 5-?
- **Patient Blood Management Bundles to facilitate implementation** *ANASTHESIOLOGIE & INTENSIVMEDIZIN*
Meybohm, P., Richards, T., Isbister, J., Hofmann, A., Shander, A., GOODNOUGH, L. T., Munoz, M., Gombotz, H., Weber, C. F., Choorapoikayil, S., Spahn, D. R., Zacharowski, K.
2017; 58: 16-29
- **Patient Blood Management Bundles to Facilitate Implementation** *TRANSFUSION MEDICINE REVIEWS*
Meybohm, P., Richards, T., Isbister, J., Hofmann, A., Shander, A., Goodnough, L. T., Munoz, M., Gombotz, H., Weber, C. F., Choorapoikayil, S., Spahn, D. R., Zacharowski, K.
2017; 31 (1): 62-71
- **National and International Guidelines for Patient Blood Management in Obstetrics: A Qualitative Review** *ANESTHESIA AND ANALGESIA*
Shaylor, R., Weiniger, C. F., Austin, N., Tzabazis, A., Shander, A., Goodnough, L. T., Butwick, A. J.
2017; 124 (1): 216-232
- **Zika Virus and Patient Blood Management** *ANESTHESIA AND ANALGESIA*
Goodnough, L. T., Marques, M. B.
2017; 124 (1): 282-289
- **How I train specialists in transfusion medicine** *TRANSFUSION*
Goodnough, L. T., Murphy, M. F.
2016; 56 (12): 2923-2933
- **Management of Anemia in Patients with Congestive Heart Failure.** *American journal of hematology*
Goodnough, L. T., Comin-Colet, J., Leal-Noval, S., Ozawa, S., Takere, J., Henry, D., Javidroozi, M., Hohmuth, B., Bisbe, E., Gross, I., Shander, A.
2016
- **How I use clinical decision support to improve red blood cell utilization.** *Transfusion*
Tim Goodnough, L., Andrew Baker, S., Shah, N.
2016; 56 (10): 2406-2411
- **How I use clinical decision support to improve red blood cell utilization** *TRANSFUSION*
Goodnough, L. T., Baker, S. A., Shah, N.
2016; 56 (10): 2406-2411
- **Knowledge of blood loss at delivery among postpartum patients** *PEERJ*
Farber, M. K., Miller, C. M., Ramachandran, B., Hegde, P., Akbar, K., Goodnough, L. T., Butwick, A. J.
2016; 4
- **National and International Guidelines for Patient Blood Management in Obstetrics: A Qualitative Review.** *Anesthesia and analgesia*
Shaylor, R., Weiniger, C. F., Austin, N., Tzabazis, A., Shander, A., Goodnough, L. T., Butwick, A. J.
2016: -?
- **Clinical Pattern in Hypotensive Transfusion Reactions.** *Anesthesia and analgesia*
Metcalf, R. A., Bakhtary, S., Goodnough, L. T., Andrews, J.
2016; 123 (2): 268-273
- **Transportation Cooler Interventions Reduce Plasma and RBC Product Wastage.** *American journal of clinical pathology*
Metcalf, R. A., Baker, S. A., Goodnough, L. T., Shah, N.
2016; 146 (1): 18-24
- **The Judicious Use of Recombinant Factor VIIa.** *Seminars in thrombosis and hemostasis*
Goodnough, L. T., Levy, J. H.
2016; 42 (2): 125-132
- **Twist1 Contributes to Cranial Bone Initiation and Dermal Condensation by Maintaining Wnt Signaling Responsiveness** *DEVELOPMENTAL DYNAMICS*
Goodnough, L., Dinuoscio, G. J., Atit, R. P.

2016; 245 (2): 144-156

- **How do I implement an automated screen for high-titer ABO antibody as an inventory management tool for ABO plasma-incompatible platelets?** *TRANSFUSION*
Fontaine, M. J., Webster, J., Gomez, S., Pham, T. D., Goodnough, L. T., Galel, S. A.
2015; 55 (12): 2783-2789
- **Is there a "magic" hemoglobin number? Clinical decision support promoting restrictive blood transfusion practices.** *American journal of hematology*
Goodnough, L. T., Shah, N.
2015; 90 (10): 927-933
- **Transfusions for anemia in adult and pediatric patients with malignancies.** *Blood reviews*
Shah, N., Andrews, J., Goodnough, L. T.
2015; 29 (5): 291-299
- **Transfusion and coagulation management in major obstetric hemorrhage** *CURRENT OPINION IN ANESTHESIOLOGY*
Butwick, A. J., Goodnough, L. T.
2015; 28 (3): 275-284
- **Iron Deficiency Anemia in Women: A Practical Guide to Detection, Diagnosis, and Treatment** *OBSTETRICAL & GYNECOLOGICAL SURVEY*
Friedman, A. J., Shander, A., Martin, S. R., Calabrese, R. K., Ashton, M. E., Lew, I., Seid, M. H., Goodnough, L. T.
2015; 70 (5): 342-353
- **Dentate Gyrus Development Requires ERK Activity to Maintain Progenitor Population and MAPK Pathway Feedback Regulation** *JOURNAL OF NEUROSCIENCE*
Vithayathil, J., Pucilowska, J., Goodnough, L., Atit, R. P., Landreth, G. E.
2015; 35 (17): 6836-6848
- **Infusion pump-mediated mechanical hemolysis in pediatric patients.** *Annals of clinical and laboratory science*
Hughes, J., McNaughton, J., Andrews, J., George, T., Bergero, C., Pyke-Grimm, K., Galel, S. A., Gonzalez, C., Goodnough, L. T., Fontaine, M. J.
2015; 45 (2): 140-147
- **How I use fibrinogen replacement therapy in acquired bleeding** *BLOOD*
Levy, J. H., Goodnough, L. T.
2015; 125 (9): 1387-1393
- **Why Providers Transfuse Blood Products Outside Recommended Guidelines in Spite of Integrated Electronic Best Practice Alerts** *JOURNAL OF HOSPITAL MEDICINE*
Chen, J. H., Fang, D. Z., Goodnough, L. T., Evans, K. H., Porter, M. L., Shieh, L.
2015; 10 (1): 1-7
- **Intravenous Iron Therapy in Patients with Iron Deficiency Anemia: Dosing Considerations.** *Anemia*
Koch, T. A., Myers, J., Goodnough, L. T.
2015; 2015: 763576-?
- **Cryoprecipitate therapy** *BRITISH JOURNAL OF ANAESTHESIA*
Nascimento, B., GOODNOUGH, L. T., Levy, J. H.
2014; 113 (6): 922-934
- **The Next Chapter in Patient Blood Management Real-Time Clinical Decision Support** *AMERICAN JOURNAL OF CLINICAL PATHOLOGY*
Goodnough, L. T., Shah, N.
2014; 142 (6): 741-747
- **Lack of dystrophin results in abnormal cerebral diffusion and perfusion in vivo** *NEUROIMAGE*
Goodnough, C. L., Gao, Y., Li, X., Qutaish, M. Q., Goodnough, L., Molter, J., Wilson, D., Flask, C. A., Yu, X.
2014; 102: 809-816
- **Blood utilization and hemoglobin levels in cancer patients after label and coverage changes for erythropoiesis-stimulating agents** *EXPERT REVIEW OF HEMATOLOGY*
Xu, H., Kaye, J. A., Saltus, C. W., Crawford, J., Gasal, E., Goodnough, L. T.
2014; 7 (5): 617-633

- **Restrictive blood transfusion practices are associated with improved patient outcomes** *TRANSFUSION*
Goodnough, L. T., Maggio, P., Hadhazy, E., Shieh, L., Hernandez-Boussard, T., Khari, P., Shah, N.
2014; 54 (10): 2753-2759
- **Case report of a transfusion-associated hepatitis A infection** *TRANSFUSION*
Hughes, J. A., Fontaine, M. J., Gonzalez, C. L., Layon, A. G., Goodnough, L. T., Galel, S. A.
2014; 54 (9): 2202-2206
- **The scientific basis for patient blood management** *TRANSFUSION CLINIQUE ET BIOLOGIQUE*
Murphy, M. F., GOODNOUGH, L. T.
2014; 22 (3): 90-96
- **Iron Deficiency Anemia-Bridging the Knowledge and Practice Gap** *TRANSFUSION MEDICINE REVIEWS*
Shander, A., Goodnough, L. T., Javidroozi, M., Auerbach, M., Carson, J., Ershler, W. B., Ghiglione, M., Glaspy, J., Lew, I.
2014; 28 (3): 156-166
- **Perioperative and transfusion outcomes in women undergoing cesarean hysterectomy for abnormal placentation.** *Transfusion*
Brookfield, K. F., Goodnough, L. T., Lyell, D. J., Butwick, A. J.
2014; 54 (6): 1530-1536
- **Improved blood utilization using real-time clinical decision support.** *Transfusion*
Goodnough, L. T., Shieh, L., Hadhazy, E., Cheng, N., Khari, P., Maggio, P.
2014; 54 (5): 1358-1365
- **Fibrinogen as a therapeutic target for bleeding: a review of critical levels and replacement therapy** *TRANSFUSION*
Levy, J. H., Welsby, I., Goodnough, L. T.
2014; 54 (5): 1389-1405
- **Ferric carboxymaltose in patients with iron-deficiency anemia and impaired renal function: the REPAIR-IDA trial** *NEPHROLOGY DIALYSIS TRANSPLANTATION*
Onken, J. E., Bregman, D. B., Harrington, R. A., Morris, D., Buerkert, J., Hamerski, D., Iftikhar, H., Mangoo-Karim, R., Martin, E. R., Martinez, C. O., Newman, G. E., Qunibi, W. Y., Ross, et al
2014; 29 (4): 833-842
- **Experience with intravenous ferric carboxymaltose in patients with iron deficiency anemia.** *Therapeutic advances in hematology*
Bregman, D. B., Goodnough, L. T.
2014; 5 (2): 48-60
- **Open aortic valve replacement in a patient with Glanzmann's thrombasthenia: a multidisciplinary strategy to minimize perioperative bleeding.** *Transfusion*
Sheikh, A. Y., Hill, C. C., Goodnough, L. T., Leung, L. L., Fischbein, M. P.
2014; 54 (2): 300-305
- **Distinct Requirements for Cranial Ectoderm and Mesenchyme-Derived Wnts in Specification and Differentiation of Osteoblast and Dermal Progenitors** *PLOS GENETICS*
Goodnough, L., DiNuscio, G. J., Ferguson, J. W., Williams, T., Lang, R. A., Atit, R. P.
2014; 10 (2): e1004152
- **A multicenter, randomized, active-controlled study to investigate the efficacy and safety of intravenous ferric carboxymaltose in patients with iron deficiency anemia** *TRANSFUSION*
Onken, J. E., Bregman, D. B., Harrington, R. A., Morris, D., Acs, P., Akright, B., Barish, C., Bhaskar, B. S., Smith-Nguyen, G. N., Butcher, A., Koch, T. A., Goodnough, L. T.
2014; 54 (2): 306-315
- **Successful treatment of recurrent hyperhemolysis syndrome with immunosuppression and plasma-to-red blood cell exchange transfusion** *TRANSFUSION*
Uhlmann, E. J., Shenoy, S., Goodnough, L. T.
2014; 54 (2): 384-388
- **Evaluation and management of anemia in the elderly** *AMERICAN JOURNAL OF HEMATOLOGY*
Goodnough, L. T., Schrier, S. L.

2014; 89 (1): 88-96

- **Alternatives to blood transfusion** *LANCET*
Spahn, D. R., Goodnough, L. T.
2013; 381 (9880): 1855-1865
- **Concepts of blood transfusion in adults.** *Lancet*
Goodnough, L. T., Levy, J. H., Murphy, M. F.
2013; 381 (9880): 1845-1854
- **Transfusion outcomes in patients undergoing coronary artery bypass grafting treated with prasugrel or clopidogrel: TRITON-TIMI 38 retrospective data analysis** *JOURNAL OF THORACIC AND CARDIOVASCULAR SURGERY*
Goodnough, L. T., Smith, P. K., Levy, J. H., Poston, R. S., Short, M. A., Weerakkody, G. J., LeNarz, L. A.
2013; 145 (4): 1077-?
- **Logistics of transfusion support for patients with massive hemorrhage** *CURRENT OPINION IN ANESTHESIOLOGY*
Goodnough, L. T., Spain, D. A., Maggio, P.
2013; 26 (2): 208-214
- **Update on erythropoiesis-stimulating agents.** *Best practice & research. Clinical anaesthesiology*
Goodnough, L. T., Shander, A.
2013; 27 (1): 121-129
- **Hepcidin levels predict nonresponsiveness to oral iron therapy in patients with iron deficiency anemia** *AMERICAN JOURNAL OF HEMATOLOGY*
Bregman, D. B., Morris, D., Koch, T. A., He, A., Goodnough, L. T.
2013; 88 (2): 97-101
- **Current Status of Pharmacologic Therapies in Patient Blood Management** *ANESTHESIA AND ANALGESIA*
Goodnough, L. T., Shander, A.
2013; 116 (1): 15-34
- **Blood ordering from the operating room: turnaround time as a quality indicator** *TRANSFUSION*
McClain, C. M., Hughes, J., Andrews, J. C., Blackburn, J., Sephel, S., France, D., Viele, M., Goodnough, L. T., Young, P. P.
2013; 53 (1): 41-48
- **Twist1 mediates repression of chondrogenesis by beta-catenin to promote cranial bone progenitor specification** *DEVELOPMENT*
Goodnough, L., Chang, A. T., Treloar, C., Yang, J., Scacheri, P. C., Atit, R. P.
2012; 139 (23): 4428-4438
- **Mortality Benefit With Prasugrel in the TRITON-TIMI 38 Coronary Artery Bypass Grafting Cohort Risk-Adjusted Retrospective Data Analysis** *JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY*
Smith, P. K., Goodnough, L. T., Levy, J. H., Poston, R. S., Short, M. A., Weerakkody, G. J., LeNarz, L. A.
2012; 60 (5): 388-396
- **Iron deficiency syndromes and iron-restricted erythropoiesis (CME)** *TRANSFUSION*
Goodnough, L. T.
2012; 52 (7): 1584-1592
- **A Reappraisal of Plasma, Prothrombin Complex Concentrates, and Recombinant Factor VIIa in Patient Blood Management** *CRITICAL CARE CLINICS*
Goodnough, L. T.
2012; 28 (3): 413-?
- **Postpartum hemorrhage treated with a massive transfusion protocol at a tertiary obstetric center: a retrospective study** *INTERNATIONAL JOURNAL OF OBSTETRIC ANESTHESIA*
Gutierrez, M. C., GOODNOUGH, L. T., Druzin, M., Butwick, A. J.
2012; 21 (3): 230-235
- **Operational, Quality, and Risk Management in the Transfusion Service: Lessons Learned** *TRANSFUSION MEDICINE REVIEWS*
Goodnough, L. T.
2012; 26 (3): 252-261

- **Use of point-of-care testing for plasma therapy** *TRANSFUSION*
Goodnough, L. T., Hill, C. C.
2012; 52: 56S-64S
- **A novel allocation strategy for blood transfusions: investigating the tradeoff between the age and availability of transfused blood** *TRANSFUSION*
Atkinson, M. P., Fontaine, M. J., Goodnough, L. T., Wein, L. M.
2012; 52 (1): 108-117
- **How we treat: transfusion medicine support of obstetric services** *TRANSFUSION*
Goodnough, L. T., Daniels, K., Wong, A. E., Viele, M., Fontaine, M. F., Butwick, A. J.
2011; 51 (12): 2540-2548
- **Complement (C1q) fixing solid-phase screening for HLA antibodies increases the availability of compatible platelet components for refractory patients** *TRANSFUSION*
Fontaine, M. J., Kuo, J., Chen, G., Galel, S. A., Miller, E., Sequeira, F., Viele, M., Goodnough, L. T., Tyan, D. B.
2011; 51 (12): 2611-2618
- **Massive Transfusion Protocols for Patients With Substantial Hemorrhage** *TRANSFUSION MEDICINE REVIEWS*
Young, P. P., Cotton, B. A., Goodnough, L. T.
2011; 25 (4): 293-303
- **Appropriateness of Allogeneic Red Blood Cell Transfusion: The International Consensus Conference on Transfusion Outcomes** *TRANSFUSION MEDICINE REVIEWS*
Shander, A., Fink, A., Javidroozi, M., Erhard, J., Farmer, S. L., Corwin, H., Goodnough, L. T., Hofmann, A., Isbister, J., Ozawa, S., Spahn, D. R.
2011; 25 (3): 232-246
- **How I treat warfarin-associated coagulopathy in patients with intracerebral hemorrhage** *BLOOD*
Goodnough, L. T., Shander, A.
2011; 117 (23): 6091-6099
- **2011 Update to The Society of Thoracic Surgeons and the Society of Cardiovascular Anesthesiologists Blood Conservation Clinical Practice Guidelines** *ANNALS OF THORACIC SURGERY*
Ferraris, V. A., Brown, J. R., Despotis, G. J., Hammon, J. W., Reece, T. B., Saha, S. P., Song, H. K., Clough, E. R., Shore-Lesserson, L. J., Goodnough, L. T., Mazer, C. D., Shander, A., Stafford-Smith, et al
2011; 91 (3): 944-982
- **Quality management in the transfusion service: case studies in process improvement** *TRANSFUSION*
Goodnough, L. T., Viele, M., Fontaine, M., Chua, L., Ferrer, Z., Jurado, C., Quach, P., Dunlap, M., Arber, D. A.
2011; 51 (3): 600-609
- **Detection, evaluation, and management of preoperative anaemia in the elective orthopaedic surgical patient: NATA guidelines** *BRITISH JOURNAL OF ANAESTHESIA*
Goodnough, L. T., Maniatis, A., Earnshaw, P., Benoni, G., Beris, P., Bisbe, E., Fergusson, D. A., Gombotz, H., Habler, O., Monk, T. G., Ozier, Y., Slappendel, R., Szpalski, et al
2011; 106 (1): 13-22
- **Detection, evaluation, and management of anemia in elective surgery** *ANASTHESIOLOGIE & INTENSIVMEDIZIN*
GOODNOUGH, L. T.
2011; 52: 37-40
- **Detection, evaluation, and management of iron-restricted erythropoiesis** *BLOOD*
Goodnough, L. T., Nemeth, E., Ganz, T.
2010; 116 (23): 4754-4761
- **Recombinant Factor VIIa: An Assessment of Evidence Regarding Its Efficacy and Safety in the Off-Label Setting** *HEMATOLOGY-AMERICAN SOCIETY OF HEMATOLOGY EDUCATION PROGRAM*
Logan, A. C., Goodnough, L. T.
2010: 153-159
- **Age of blood as a limitation for transfusion: potential impact on blood inventory and availability** *TRANSFUSION*
Fontaine, M. J., Chung, Y. T., Erhun, F., Goodnough, L. T.

2010; 50 (10): 2233-2239

- **Impact of cytomegalovirus (CMV) antibody reflex testing in the transfusion service on management of CMV-seronegative blood inventory** *TRANSFUSION*
Fontaine, M. J., Jurado, C., Miller, E., Viele, M., Goodnough, L. T.
2010; 50 (8): 1685-1689
- **Randomized Evaluation of efficacy and safety of ferric carboxymaltose in Patients with iron deficiency Anaemia and Impaired Renal function (REPAIR-IDA): rationale and study design** *NEPHROLOGY DIALYSIS TRANSPLANTATION*
Szczzech, L. A., Bregman, D. B., Harrington, R. A., Morris, D., Butcher, A., Koch, T. A., Goodnough, L. T., Wolf, M., Onken, J. E.
2010; 25 (7): 2368-2375
- **Comparative gene expression analysis of avian embryonic facial structures reveals new candidates for human craniofacial disorders** *HUMAN MOLECULAR GENETICS*
Brugmann, S. A., Powder, K. E., Young, N. M., Goodnough, L. H., Hahn, S. M., James, A. W., Helms, J. A., Lovett, M.
2010; 19 (5): 920-930
- **Recombinant factor VIIa: an assessment of evidence regarding its efficacy and safety in the off-label setting.** *Hematology / the Education Program of the American Society of Hematology. American Society of Hematology. Education Program*
Logan, A. C., Goodnough, L. T.
2010; 2010: 153-159
- **Management of preoperative anaemia in patients undergoing elective surgery** *31st International Congress of the International-Society-of-Blood-Transfusion/43rd Congress of the DGTI*
Goodnough, L. T., Manaitis, A., Earnshaw, P.
WILEY-BLACKWELL.2010: 120-24
- **Large-dose intravenous ferric carboxymaltose injection for iron deficiency anemia in heavy uterine bleeding: a randomized, controlled trial** *TRANSFUSION*
Van Wyck, D. B., Mangione, A., Morrison, J., Hadley, P. E., Jehle, J. A., Goodnough, L. T.
2009; 49 (12): 2719-2728
- **Improving platelet supply chains through collaborations between blood centers and transfusion services** *TRANSFUSION*
Fontaine, M. J., Chung, Y. T., Rogers, W. M., Sussmann, H. D., Quach, P., Galel, S. A., Goodnough, L. T., Erhun, F.
2009; 49 (10): 2040-2047
- **Retrospective analysis of transfusion outcomes in pregnant patients at a tertiary obstetric center** *INTERNATIONAL JOURNAL OF OBSTETRIC ANESTHESIA*
Butwick, A. J., Aleshi, P., Fontaine, M., Riley, E. T., GOODNOUGH, L. T.
2009; 18 (4): 302-308
- **Implementation of a two-specimen requirement for verification of ABO/Rh for blood transfusion** *TRANSFUSION*
Goodnough, L. T., Viele, M., Fontaine, M. J., Jurado, C., Stone, N., Quach, P., Chua, L., Chin, M., Scott, R., Tokareva, I., Tabb, K., Sharek, P. J.
2009; 49 (7): 1321-1328
- **Why an Alternative to Blood Transfusion?** *CRITICAL CARE CLINICS*
Shander, A., Goodnough, L. T.
2009; 25 (2): 261-?
- **Iron overload and toxicity: the hidden risk of multiple blood transfusions** *VOX SANGUINIS*
Shander, A., Cappellini, M. D., GOODNOUGH, L. T.
2009; 97 (3): 185-197
- **The role of intravenous iron in anemia management and transfusion avoidance** *TRANSFUSION*
Auerbach, M., Goodnough, L. T., Picard, D., Maniatis, A.
2008; 48 (5): 988-1000
- **Impact of clinical trial design and execution-related factors on incidence of thromboembolic events in cancer patients: a systematic review and metaanalysis** *CURRENT MEDICAL RESEARCH AND OPINION*
Reynolds, M. W., Shibata, A., Zhao, S., Jones, N., Fahrback, K., Goodnough, L. T.
2008; 24 (2): 497-505

- **Alloimmunization to red blood cell antigens affects clinical outcomes in liver transplant patients** *LIVER TRANSPLANTATION*
Boyd, S. D., Stenard, F., Lee, D. K., Goodnough, L. T., Esquivel, C. O., Fontaine, M. J.
2007; 13 (12): 1654-1661
- **Transfusion triggers** *2nd Thrombin Symposium on Challenges in Surgical Hemostasis*
Goodnough, L. T.
MOSBY-ELSEVIER.2007: S67-S70
- **Wnt signaling mediates regional specification in the vertebrate face** *DEVELOPMENT*
Brugmann, S. A., Goodnough, L. H., Gregorieff, A., Leucht, P., Ten Berge, D., Fuerer, C., Clevers, H., Nusse, R., Helms, J. A.
2007; 134 (18): 3283-3295
- **Update on transfusion medicine** *PHARMACOTHERAPY*
Shander, A., Goodnough, L. T.
2007; 27 (9): 57S-68S
- **How we treat: management of life-threatening primary postpartum hemorrhage with a standardized massive transfusion protocol** *TRANSFUSION*
Burtelow, M., Riley, E., Druzin, M., Fontaine, M., Viele, M., Goodnough, L. T.
2007; 47 (9): 1564-1572
- **Stage-dependent craniofacial defects resulting from Sprouty2 overexpression** *DEVELOPMENTAL DYNAMICS*
Goodnough, L. H., Brugmann, S. A., Hu, D., Helms, J. A.
2007; 236 (7): 1918-1928
- **Functional demarcation of active and silent chromatin domains in human HOX loci by Noncoding RNAs** *CELL*
Rinn, J. L., Kertesz, M., Wang, J. K., Squazzo, S. L., Xu, X., Brugmann, S. A., Goodnough, L. H., Helms, J. A., Farnham, P. J., Segal, E., Chang, H. Y.
2007; 129 (7): 1311-1323
- **Blood management** *ARCHIVES OF PATHOLOGY & LABORATORY MEDICINE*
Goodnough, L. T., Shander, A.
2007; 131 (5): 695-701
- **Erythropoietin and iron-restricted erythropoiesis** *International Symposium on Recent Advances in Radiation Effects, Hematopoiesis and Malignancy in honor of Eugene P Cronkite*
Goodnough, L. T.
ELSEVIER SCIENCE INC.2007: 167-72
- **Objectives and limitations of bloodless medical care** *CURRENT OPINION IN HEMATOLOGY*
Shander, A., Goodnough, L. T.
2006; 13 (6): 462-470
- **The relevance of iron in erythropoietin-stimulated erythropoiesis** *SEMINARS IN HEMATOLOGY*
Goodnough, L. T.
2006; 43 (4): S3-S8
- **Clinical benefits and risks associated with epoetin and darbepoetin in patients with chemotherapy-induced anemia: A systematic review of the literature** *CLINICAL THERAPEUTICS*
Ross, S. D., Allen, I. E., Henry, D. H., Seaman, C., Sercus, B., Goodnough, L. T.
2006; 28 (6): 801-831
- **Identification, diagnosis, and management of anemia in adult ambulatory patients treated by primary care physicians: evidence-based and consensus recommendations** *CURRENT MEDICAL RESEARCH AND OPINION*
Dubois, R. W., GOODNOUGH, L. T., Ershler, W. B., Van Winkle, L., Nissenson, A. R.
2006; 22 (2): 385-395
- **Detection, evaluation, and management of anemia in the elective surgical patient** *ANESTHESIA AND ANALGESIA*
Goodnough, L. T., Shander, A., Spivak, J. L., Waters, J. H., Friedman, A. J., Carson, J. L., Keating, E. M., Maddox, T., Spence, R.
2005; 101 (6): 1858-1861
- **Current issues in transfusion medicine.** *Clinical advances in hematology & oncology : H&O*

Goodnough, L.
2005; 3 (8): 614-616

● **Risks of blood transfusion.** *Anesthesiology clinics of North America*

Goodnough, L. T.
2005; 23 (2): 241-?

● **Autologous blood donation.** *Anesthesiology clinics of North America*

Goodnough, L. T.
2005; 23 (2): 263-?

● **Medical progress: Anemia of chronic disease** *NEW ENGLAND JOURNAL OF MEDICINE*

Weiss, G., GOODNOUGH, L. T.
2005; 352 (10): 1011-1023

● **Rationale for blood conservation.** *Surgical infections*

Goodnough, L. T.
2005; 6: S3-8

● **Therapeutic efficacy and safety of platelets treated with a photochemical process for pathogen inactivation: the SPRINT Trial** *BLOOD*

McCullough, J., Vesole, D. H., Benjamin, R. J., Slichter, S. J., Pineda, A., Snyder, E., Stadtmauer, E. A., Lopez-Plaza, I., Coutre, S., Strauss, R. G., GOODNOUGH, L. T., Friley, J. L., Raife, et al
2004; 104 (5): 1534-1541

● **Blood and blood conservation: A national perspective** *JOURNAL OF CARDIOTHORACIC AND VASCULAR ANESTHESIA*

Goodnough, L. T.
2004; 18 (4): 6S-11S

● **A PHASE-III RANDOMIZED STUDY COMPARING CISPLATIN AND FLUOROURACIL AS SINGLE AGENTS AND IN COMBINATION FOR ADVANCED SQUAMOUS-CELL CARCINOMA OF THE HEAD AND NECK** *JOURNAL OF CLINICAL ONCOLOGY*

Jacobs, C., Lyman, G., VELEZGARCIA, E., Sridhar, K. S., Knight, W., Hochster, H., GOODNOUGH, L. T., Mortimer, J. E., Einhorn, L. H., Schacter, L., CHERNG, N., Dalton, T., Burroughs, et al
1992; 10 (2): 257-263