Appendix 3: Related Articles

Ährlund-Richter, L., De Luca, M., Marshak, D.R., Munsie, M., Veiga, A., and Rao, M. (2009). Isolation and production of cells suitable for human therapy: Challenges Ahead. *Cell Stem Cell 4*, in press. Published online December 4, 2008.

Daley, G. Q., Hyun, I., and Lindvall, O. (2008). Mapping the Road to the Clinical Translation of Stem Cells. *Cell Stem Cell* 2, 139-140. http://download.cell.com/cell-stem-cell/pdf/PIIS193459090800012X.pdf

Hyun, I., Taylor, P., Testa, G., Dickens, B., Jung, K. W., McNab, A., Robertson, J., Skene, L., and Zoloth, L. (2007). Ethical Standards for Human-to-Animal Chimera Experiments in Stem Cell Research. *Cell Stem Cell 1*, 159-163. http://download.cell.com/cell-stem-cell/pdf/PIIS193459090700080X.pdf

Hyun, I., Lindvall, O., Ährlund-Richter, L., Cattaneo, E., Cavazzana-Calvo, M., Cossu, G., De Luca, M., Fox, I. J., Gerstle, C., Goldstein, R. A., Hermerén, G., High, K. A., Kim, H. O., Lee, H. P., Levy-Lahad, E., Li, L., Lo, B., Marshak, D. R., McNab, M., Munsie, M., Nakauchi, H., Rao, M., Rooke, H. M., Simon Valles, C., Srivastava, A., Sugarman, J., Taylor, P. L., Veiga, A., Wong, A. L., Zoloth, L. and Daley, G. Q. (2008). New ISSCR Guidelines Underscore Major Principles for Responsible Translational Stem Cell Research. *Cell Stem Cell 3*, 607-610.

Appendix 4: Acronyms and Definitions

Allogeneic transplantation: refers to the transplantation of cells from a donor to another person.

Autologous transplantation: refers to the transplantation to a patient of his/her own cells.

Ectopic tissue: foreign tissue of one type that forms in a distinct tissue or non-native location, as a result of the transfer of cellular products.

Ex vivo: (Latin, outside the living) refers to the manipulation of cells, tissues or organs outside of the body with the intent to return to a living body.

Homologous use: refers to intended therapeutic use of cells within their native physiological context, for example, the transplantation of hematopoietic stem cells to regenerate the blood.

In vivo: (Latin, inside the living) occurring within the body.

In vitro: (Latin, in the glass) occurring outside of the body.

Non-homologous use: refers to intended therapeutic use of cells outside their native physiological context, for example, the transplantation of hematopoietic stem cells into the heart for repair or regeneration of myocardial tissue.

Teratoma: a benign, encapsulated mass of complex differentiated tissues comprising elements of all three embryonic germ layers: ectoderm, endoderm, and mesoderm. Used to assess the pluripotency of stem cells (their capacity to form all tissues in the body).

Tumorigenicity: the property of cells that describes their potential for forming tumors, or abnormal growths of cells.

AHCTA, Alliance for Harmonisation of Cellular Therapy Accreditation. AHCTA represents the American Association of Blood Banks (AABB), American Society for Blood & Marrow Transplantation (ASBMT), European Federation for Immunogenetics (EFI), European Group for Blood & Marrow Transplantation (EBMT), Foundation for the Accreditation of Cellular Therapy (FACT), International Society for Cellular Therapy (ISCT) (Europe), Joint Accreditation Committee ISCT-EBMT (JACIE), International NETCORD Foundation, and the World Marrow Donor Association (WMDA). For more information: www.ahcta.org

ISCF, International Stem Cell Forum. The ISCF represents 21 funders of stem cell research from around the world and has undertaken several international projects that address key issues for stem cell scientists and funders. For more information: www.stemcellforum.org

