

My laboratory is studying factors which determine cross-talk between bone and energy metabolism. This includes studies on the skeletal status in diabetes and safety for bone of anti-diabetic therapies. We have demonstrated in a variety of animal models that the same factors which regulate energy metabolism are involved in regulation of bone homeostasis. We also hypothesize that changes in fat metabolic status, such as impairment in fat function in diabetes or improvement due to increased insulin sensitivity, correlate with decline or improvement in bone quality, respectively. Primary outcome of our research is to determine whether it is possible to develop one therapy which would be simultaneously beneficial for treatment of diabetes and osteoporosis. I am also actively involved in educational activities to propagate research on skeletal status in diabetes acting as Editor-in-Chief of the book *Diabetic Bone Disease* published by Springer (2016), Guest Editor of *Bone Special Issue on Metabolism and Diabetes Mellitus* (2016), Guest Editor of *Current Osteoporosis Reports Special Issue on Bone and Fat* (2018), Guest Editor of *Bone Special Issue on Bone and Adipose Tissue* (2018) and as a member of ASBMR Work Group to Promote Communication with Diabetes Researchers. The work of this group resulted in organization of Joint ADA/ASBMR Symposium at the ADA 76th Scientific Session (June 2016) titled “*Sticks and Stones Can Break My Bones: What About Diabetes?*” and comprehensive reviews published in *Diabetes* (2016), *Diabetologia* (2017), and *Endocrine Reviews* (in preparation).

EDUCATION

B.Sc., Biology, University of Warsaw, Poland, 1979

M.Sc., Genetics, University of Warsaw, Poland, 1980

Ph.D., Molecular Biology, Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Poland, 1985

Postdoctoral Fellowship, Molecular Bases of Cellular Senescence (Mentor - S. Goldstein, PhD), University of Arkansas for Medical Sciences, Little Rock, AR, 1995

COMPLETE LIST OF PUBLISHED WORK

<http://www.ncbi.nlm.nih.gov/pubmed/?term=lecka-czernik>