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### Determination of protein synthesis on a proteomic scale

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List of publications

**Kramer, G.**, Kasper, P. T., de Jong, L., and de Koster, C. G. (2011) *Quantitation of newly synthesized proteins by pulse labeling with azidohomoalanine*. *Methods Mol. Biol.* 753, 169-181. (c)

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**Kramer, G.**, Sprenger, R. R., Nessen, M. A., Roseboom, W., Speijer, D., de Jong, L., de Mattos, M. J., Back, J., and de Koster, C. G. (2010) *Proteome-wide alterations in Escherichia coli translation rates upon anaerobiosis*. *Mol. Cell. Proteomics* 9, 2508-2516. (d)

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**Kramer, G.**, Sprenger, R. R., Back, J., Dekker, H. L., Nessen, M. A., van Maarseveen, J. H., de Koning, L. J., Hellingwerf, K. J., de Jong, L., and de Koster, C. G. (2009) *Identification and quantitation of newly synthesized proteins in Escherichia coli by enrichment of azidohomoalanine-labeled peptides with diagonal chromatography*. *Mol. Cell. Proteomics* 8, 1599-1611. (a)

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Bekker, M., **Kramer, G.**, Hartog, A. F., Wagner, M. J., de Koster, C. G., Hellingwerf, K. J., and de Mattos, M. J. (2007) *Changes in the redox state and composition of the quinone pool of Escherichia coli during aerobic batch-culture growth*. *Microbiology* 153, 1974-1980.

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Cremazy, F. G., Manders, E. M., Bastiaens, P. I., **Kramer, G.**, Hager, G. L., van Munster, E. B., Verschure, P. J., Gadella, T. J., Jr., and van Driel, R. (2005) *Imaging in situ protein-DNA interactions in the cell nucleus using FRET-FLIM*. *Exp. Cell. Res.* 309, 390-396.

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## Chapters

1. Regulation of protein levels: balancing synthesis and degradation  
*Gertjan Kramer*
2. Effects of azidohomoalanine on bacterial growth, viability and protein function  
*Gertjan Kramer, JaapWillem Back, Vineeta Pradhan, Michael A. van der Horst, Winfried Roseboom, Luitzen de Jong, Klaas J. Hellingwerf, Tina M. Henkin and Chris G. de Koster (a)*
3. Identification of newly synthesized *E. coli* proteins by enrichment of azidohomoalanine-labelled peptides using diagonal chromatography  
*Gertjan Kramer, Richard R. Sprenger, JaapWillem Back, Henk L. Dekker, Merel A. Nessen, Piotr T. Kasper, Jan H. van Maarseveen, Leo J. de Koning, Klaas J. Hellingwerf, Luitzen de Jong and Chris G. de Koster (a,b,c)*
4. Immediate changes in both protein levels and newly synthesized proteins following a change in growth temperature in *E. coli*  
*Gertjan Kramer, Richard R. Sprenger, Merel A. Nessen, Henk L. Dekker, Winfried Roseboom, JaapWillem Back, Luitzen de Jong, Klaas J. Hellingwerf, Chris G. de Koster (a)*
5. Proteome-wide alterations in *E. coli* translation rates upon anaerobiosis.  
*Gertjan Kramer, Richard R. Sprenger, Merel A. Nessen, Winfried Roseboom, Dave Speijer, Luitzen de Jong, M. Joost Teixeira de Mattos, JaapWillem Back and Chris G. de Koster (d)*
6. General Discussion  
*Gertjan Kramer*