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Título Profesional o Grado Académico (incluya el año de obtención):

INGENIERO EN BIOTECNOLOGÍA MOLECULAR, FACULTAD DE CIENCIAS, UNIVERSIDAD DE CHILE, 2006.

Estudios de Postgrado o Especialización (institución donde lo obtuvo y año de obtención):

LICENCIA EN CIENCIAS BIOMÉDICAS, UNIVERSIDAD CATÓLICA DE LOVAINA, BÉLGICA

Actividad Actual e Institución en la cual trabaja:

DOCTORADO UNIVERSIDAD LIBRE DE BRUSELAS, BÉLGICA (EN DESARROLLO)

Reseña de su actividad laboral actual:

Protein folding and degradation are essential processes in the viability of all biological systems. Chaperones are key players in deciding whether a protein will be folded or degraded. At least two events are required for chaperone-assisted protein folding: chaperone binding to target sequence (short hydrophobic patches flanked by charged residues, so called gatekeepers) and chaperone ATPase activity. However, these two activities are physically dissociated in chaperones like Hsp70/DnaK. Whether all binding events yield ATPase activity, and therefore protein folding, is not clear. Using a combination of bioinformatics, biochemical, biophysical and structural approaches I aim to clarify: 1) how the highly conserved gatekeepers contribute to the control of protein folding process, and 2) how chaperone binding to its partner proteins is connected to ATPase and folding activity