Séminaire

CONFÉRENCIER INVITÉ

Vendredi 19 Novembre 2021 à 11h

Salle des séminaires IBS

Institut de biologie structurale - 71 avenue des Martyrs CS 10090 38044 Grenoble Cedex 9 - T.+33 (0)4 57 42 85 00

www.ibs.fr

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The cryo-EM structure of human thyroglobulin, a new dawn in thyroid biology

The thyroid gland is a natural bioreactor that accumulates dietary iodine to synthesise thyroid hormones from their protein precursor, thyroglobulin. Thyroid hormone yields are essential for development and control of metabolism in vertebrates, and thyroglobulin mutations are linked to a number of human diseases. We determined the first structure of human thyroglobulin at 3.5 Å resolution by electron cryomicroscopy (cryo-EM) and unravelled the mechanism of hormone synthesis by TG iodo-tyrosines. The thyroglobulin structure thus provides an essential framework to further understand the regulation of thyroid hormones *in vivo* and to study the molecular basis of widespread thyroid disorders.

Hôte : Carlo Petosa (IBS/groupe Épigénétique et voies moléculaires)

L'accès au campus EPN nécessite un avis de rendez-vous. A cet effet merci d'adresser votre demande à ibs.seminaires@ibs.fr (au moins 48h à l'avance)