研究區(通告)

摘要：高雄長庚研究區舉辦『蛋白質體轉譯後修飾分析之應用』專業訓練，請踴躍參加!

一、主旨：高雄長庚研究區舉辦『蛋白質體轉譯後修飾分析之應用』專業訓練，請踴躍參加！

二、說明：

（一）日期：103 年 11 月 27 日（星期四）

（二）時間：專題演講 10:00 ~ 12:30

（三）地點：兒童醫院 12 樓 醫研部會議室

（四）主講者：中央研究院 化學研究所/陳玉如教授

（五）課程簡介：

The abnormal S-nitrosylation induced by the overexpression and activation of inducible nitric oxide synthase (iNOS) modulates many human diseases, such as inflammation and cancer. To delineate the pathophysiological S-nitrosoproteome in cancer patients, we report an individualized S-nitrosoproteomic strategy with a label-free method for the site-specific quantification of S-nitrosylation in paired tumor and adjacent normal tissues from 11 patients with colorectal cancer (CRC). This study provides not only the first endogenous human S-nitrosoproteomic atlas but also the first individualized human tissue analysis, identifying 174 S-nitrosylation sites in 94 proteins. Fourteen novel S-nitrosylation sites with a high frequency of elevated levels in 11 individual patients were identified. An individualized S-nitrosylation quantitation analysis revealed that the detected changes in S-nitrosylation were regulated by both the expression level and the more dramatic post-translational S-nitrosylation of the targeted proteins, such as thioredoxin, annexin A4, and peroxiredoxin-4. These endogenous S-nitrosylated proteins illustrate the network of inflammation/cancer-related and redox reactions mediated by various S-nitrosylation sources, including iNOS, transnitrosylase, or iron-sulfur centers. Given the demonstrated sensitivity of individualized tissue analysis, this label-free approach may facilitate the study of the vastly under-represented S-nitrosoproteome and enable a better understanding of the effect of endogenous S-nitrosylation in cancer.

（六）報名方式：請依照附件(一)報名表報名，以方便預估本次參與人數

（七）報名日期：即日起至 103 年 11 月 26 日止