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(1 мая 1952 г. – 29 июня 2005 г.)

29 июня 2005 года на 55 году жизни скончалась старший научный сотрудник Института химической биологии и фундаментальной медицины СО РАН (лаборатория химии нуклеиновых кислот), лауреат Государственной премии Российской Федерации Евгения Михайловна Иванова.

Родилась 1 мая 1952 г. Выпускница кафедры молекулярной биологии ФЕН НГУ 1975 г. Кандидат химических наук 1984 г., тема диссертации: «Исследование триэфирного синтеза олигонуклеотидов в присутствии арилсульфохлорида и нуклеофильных катализаторов».

Лауреат Государственной премии РФ 1999 г. в области науки и техники за работу «Производные олигонуклеотидов — биологически активные вещества и инструменты исследования белково-нуклеиновых взаимодействий» (совместно с А.Г. Веняминовой, В.В. Власовым, Д.М. Грайфером, В.Ф. Зарытовой, Г.Г. Карповой, Г.А. Невинским и Л.А. Якубовым). В этой работе была решена проблема создания новых типов биологически активных веществ - перспективных терапевтических препаратов нового поколения ген-направленного действия, а также разработаны методы исследования строения нуклеопротеидных комплексов и изучения белково-нуклеиновых взаимодействий с использованием реакционноспособных производных олигонуклеотидов. В результате проведенных работ получены уникальные данные о строении функциональных центров рибосом (бактерий и человека); на поверхности клеток открыты рецепторы, взаимодействующие с нуклеиновыми кислотами, и показано, что олигонуклеотиды связываются с клеточным рецептором CD4, блокируя заражение клеток вирусом ВИЧ-1; обнаружено, что нуклеиновые кислоты взаимодействуют в кровотоке с иммуноглобулинами и ростовыми факторами. На примере ферментов репликации, репарации, топоизомеризации и рестрикции разработаны новые подходы к анализу закономерностей белково-нуклеиновых взаимодействий. Разработанные реагенты и методы нашли применение в российских и зарубежных научных центрах и фирмах.

Полученные результаты имеют как фундаментальное, так и прикладное значение в связи с созданием новых потенциальных терапевтических средств на основе нуклеиновых кислот и олигонуклеотидов. Проведенные исследования заложили основу для развития нового направления молекулярной фармакологии.

Ссылка: <http://www.niboch.nsc.ru/doku.php/ru/about/achievements>

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