

Федеральное государственное автономное образовательное учреждение  
высшего образования «Российский национальный исследовательский медицинский университет  
имени Н.И. Пирогова» Министерства здравоохранения Российской Федерации  
(ФГАОУ ВО РНИМУ им. Н.И. Пирогова Минздрава России)

Кафедра латинского языка и основ терминологии

**Экзаменационный билет № 1**

для проведения экзамена по дисциплине «Основы перевода профессиональной литературы»  
по специальности 30.05.01 Медицинская биохимия (уровень специалитета)

- 1. Используя словарь и справочные пособия, переведите устно следующий фрагмент научного текста.**

***Synthetic Biochemistry: The Bio-inspired Cell-Free Approach to  
Commodity Chemical Production***

Considerable efforts have been devoted to engineering living organisms to produce useful chemicals ranging from high-value natural products like cannabinoids to low-value products such as, fuels, plastics, and building block chemicals. Microbial generation of natural products would free us from the problems with extraction from native sources, such as agricultural boom and bust cycles, as well as resource-intensive and expensive purification requirements. Moreover, microbial production can be more environmentally benign than chemical syntheses. Perhaps the greatest environmental impact of metabolically engineered microbes will be in replacing high-volume petroleum products like fuels and commodity chemicals. There are numerous potential environmental benefits: the biomass starting materials are renewable; replacing petroleum-based starting materials can lower the release of global warming gases; and the products are generally biodegradable. However, replacing high-volume, low-value products is also the most economically challenging because cost is critical. To make bioderived products economically competitive will require high-efficiency conversion of the input biomass into useful compounds. However, efficient conversion of biomass is difficult to achieve in biological organisms.