

# Postdoctoral Fellow - Rutgers, The State University of New Jersey

Rutgers, The State University of New Jersey is seeking a Postdoctoral Fellow for the Department of Biochemistry & Molecular Biology at the Rutgers Robert Wood Johnson Medical School.

The laboratory of [Paul R. Copeland](#) seeks to determine the molecular basis for the dietary requirement for the essential trace element selenium, which is a master regulator of oxidative stress that is required for cancer prevention, immune cell function and male fertility. Selenium is incorporated into 25 proteins in humans as the "21st" amino acid, selenocysteine (Sec). The incorporation of this amino acid is unique because it requires a modification of the genetic code since the Sec tRNA recognizes the UGA stop codon. Our lab studies all aspects of Sec incorporation both at the molecular and cellular levels. Currently we are establishing transgenic zebrafish lines to address key questions in the context of developmental and organismal biology. Thus, we are bringing a broad range of techniques spanning in vitro translation to organismal biology to determine how Sec is incorporated and how Sec-containing proteins function.

This grant funded postdoctoral position will be responsible for executing all aspects of our use of zebrafish as an experimental model to investigate the mechanism of Sec incorporation and selenoprotein function.

Further Details and application information can be found at this [link](#)