Two **Postdoctoral/Research Associate** positions in the Chazin laboratory at Vanderbilt University are available for highly motivated biologists, biochemists, or structural biologists. These positions involve state of the art integrative structural biology (NMR, crystallography, SAXS, cryo EM, and modeling) in two key areas of biomedical research. Opportunities are also available to pursue fragment-based discovery of small molecule inhibitors of critical protein-protein interactions.

One program focuses on multi-domain proteins and multi-protein complexes involved in DNA replication, damage response, and repair. Projects include discerning the structural mechanisms of multi-protein machinery, the mechanistic basis for DNA priming, and the role of 4Fe-4S clusters and DNA charge transport in priming [e.g. O'Brien et al., Science **355**, 813 & eaag1789, 2017]. The second Program is directed to infectious disease and the innate response. These studies focus on the roles of calprotectin (CP) in nutritional immunity and in inflammation signaling via the receptor for advanced glycation end products (RAGE). The candidate will join a team carrying out highly inter-disciplinary research in collaboration with microbiologist Eric P. Skaar and many other laboratories at Vanderbilt and around the world. Studies include engineering the metal binding properties of CP, determining the structural mechanisms of CP activation of RAGE, and fragment-based discovery of small molecule inhibitors CP-RAGE interactions.

These positions provide an excellent opportunity to become experienced in the integrated applications of advanced structural/dynamics and chemical biology methods at the cutting edge of genome maintenance or infectious disease medicine and biology. Applicants will work in multi-disciplinary teams with an extensive network of collaborators focused on fundamental biology and clinical applications, and will be encouraged to develop their leadership potential. The Chazin laboratory is diverse and inclusive, and excels at fostering the achievement of the full potential of each group member and attaining career objectives. To apply, send a CV and the names of at least two references to walter.chazin@vanderbilt.edu.