

Postdoctoral Fellow – Bacterial metabolites

We are looking for a Postdoctoral Fellow with expertise in bacterial molecular genetics, biochemistry or infectious diseases to help out with a project aimed at the molecular characterization of bacterial metabolites involved in microbe-microbe interactions and community dynamics. You will join the Claesen group at the Cleveland Clinic Lerner Research Institute and Center for Microbiome and Human Health. Visit us at: <https://claesengroup.org/>

Our group's aim is to functionally characterize molecular mechanisms that control bacterial interspecies and microbe-host interactions in the human microbiome. Bacteria use small molecule chemicals to mediate these interactions and the genetic information required for their production is typically encoded in one physical location of the bacterial chromosome, in biosynthetic gene clusters (BGCs). Using *in silico* techniques, we identified several widespread families of BGCs that we are now characterizing experimentally, prioritizing on the BGCs predicted to be involved in modulation of community composition or interaction with the host immune system. Our research will contribute to a better mechanistic understanding of the microbes that live in our body, leading to the discovery of druggable small molecules, new targets for antibacterial therapy and beneficial bacterial strains that can be employed for intervention therapies.

Your profile

You will have (or are close to obtaining) a PhD degree in a relevant (bio)chemical or biological subject and a good publication record in peer-reviewed scientific journals. You're a motivated and creative scientist with hands-on experience in any of the following areas: bacterial molecular genetics, (natural products) biosynthesis, biochemical assays, (germ-free) mouse infection/colonization models or microbiome science.

About us

The areas of expertise in the Claesen group include microbiology, bacterial genetics and synthetic biology, small molecule biosynthesis and biochemistry, and animal models for microbiome studies of metabolic disease and cancer development. We provide a stimulating, multidisciplinary training environment that will assist you in your successful scientific development. You will receive a competitive salary and benefits package, and have access to state-of-the-art core facilities in the Lerner Research Institute (<http://www.lerner.ccf.org/>), as well as plenty of opportunities for clinical collaboration at the Cleveland Clinic, the #2 Hospital in the Nation. Cleveland living is affordable and family friendly, offering a range in activities that include an amazing nature parks, museums, major professional sports teams, an extensive theater district and blooming microbrewery scene.

How to apply

Contact Dr. Jan Claesen (claesej@ccf.org) for more info. To apply, please email your CV, a brief summary of research interests (no more than 2 pages) and contact information for 3 references.