

Claesen group – Dept. of Cellular and Molecular Medicine

Postdoctoral Fellow – Functional Microbiome

We are looking for Postdoctoral Fellows excited about advancing our mechanistic understanding of the Human Microbiome, to join the newly established Claesen group at the Cleveland Clinic Lerner Research Institute. <u>http://www.lerner.ccf.org/cmm/claesen/</u>

Our 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

Candidates will have (or are close to obtaining) a PhD degree in a relevant biological or chemical subject and a good publication record in peer-reviewed scientific journals. Hands-on experience with microbiological, molecular genetics and standard biochemical techniques is required. Prior experience in manipulation of anaerobic microbes, mouse infection models, analytical chemistry or bioinformatics are desirable (but not required).

About us

The areas of expertise in the Claesen group include microbiology, bacterial genetics and synthetic biology, small molecule biosynthesis and biochemistry. 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 (<u>http://www.lerner.ccf.org/</u>), as well as plenty of opportunities for clinical collaboration at the Cleveland Clinic, the #2 Hospital in the Nation.

How to apply

Interested applicants should submit a cover letter describing research accomplishments and interests (no more than 2 pages), a CV and contact information for 3 references to Dr. Jan Claesen (<u>claesej@ccf.org</u>) by Friday January 19, 2018. Thereafter, applications will be considered on a rolling basis.