



Am Fachbereich Biologie der Technischen Universität Darmstadt ist zum Wintersemester 2019/20 eine

Universitätsprofessur (W3) für Mikrobiologie

zu besetzen.

Der/die Stelleninhaber/in soll das Fach Mikrobiologie in seiner gesamten Breite vertreten. Mögliche Forschungsschwerpunkte sind Synthetische Mikrobiologie, Mikrobielle Genomforschung, Mikrobielle Zellbiologie oder Molekulare mikrobielle Ökologie. Eine enge Verknüpfung mit den Forschungsschwerpunkten „Synthetische Biologie“ und/oder „Radiation Response and Genome Stability“ ist erwünscht.

Gesucht wird eine Wissenschaftlerin oder ein Wissenschaftler mit internationaler Erfahrung und exzellentem Potential in Forschung und Lehre. Neben der hervorragenden Befähigung zu wissenschaftlicher Arbeit wird eine entsprechende didaktische Erfahrung erwartet. Der Fachbereich Biologie bietet eine stimulierende, interdisziplinäre Forschungsumgebung, und die Interaktion mit anderen Naturwissenschaften und/oder Ingenieurwissenschaften ist ausdrücklich erwünscht.

Die Einstellung erfolgt im Beamtenverhältnis oder in einem außertariflichen Angestelltenverhältnis mit einer qualifikationsabhängigen Besoldung/Vergütung entsprechend der W-Besoldung. Diese wird zwischen Bewerberin oder Bewerber und Hochschulleitung verhandelt. Es gelten ferner die Einstellungs Voraussetzungen der §§ 61 und 62 Hessisches Hochschulgesetz.

Die Technische Universität Darmstadt strebt eine Erhöhung des Anteils der Frauen am Personal an und fordert deshalb besonders Frauen auf, sich zu bewerben. Bewerberinnen oder Bewerber mit einem Grad der Behinderung von mindestens 50 oder diesen Gleichgestellte werden bei gleicher Eignung bevorzugt.

Die Technische Universität Darmstadt ist als familiengerechte Hochschule zertifiziert und verfügt über ein Dual Career Programm.

Bewerbungen werden mit den üblichen Unterlagen (Lebenslauf, Kopien der Abschlusszeugnisse, Beschreibung der Forschungs- und Lehraktivitäten sowie Forschungs- und Lehrkonzept, Publikationsverzeichnis, Liste der Kooperationen und der bisher eingeworbenen Drittmittel) als einzelnes PDF-Dokument unter Angabe der Kenn-Nr. bis zum 05.01.2019 an den Dekan des Fachbereichs Biologie, Technische Universität Darmstadt, Schnittpahnstraße 10, 64287 Darmstadt, dekanat@bio.tu-darmstadt.de erbeten.

Weitere Informationen über: www.bio.tu-darmstadt.de.

Kenn-Nr. 544

Bewerbungsfrist: 05. Januar 2019

Professorship (W3) in Benthic Microbiology

The Institute for Chemistry and Biology of the Marine Environment (ICBM) at the School of Mathematics and Natural Sciences invites applications for the position of a **Professorship (W3) in Benthic Microbiology** commencing **as soon as possible**.

The appointed professor is expected to cover the complete field of teaching microbiology in the Bachelor's and Master's programs of the School of Mathematics and Natural Sciences.

We seek a microbiologist with distinct expertise in physiology and diversity of prokaryotes, preferentially with anaerobic organisms. The appointed professor should investigate fundamental questions in marine microbiology, combining classical-microbiological and modern OMICS-driven approaches, and bearing the potential for modern and innovative microbiome research. It is expected that the appointed professor will contribute to future interdisciplinary, process-oriented research projects of the ICBM (see collaborative research at www.icbm.de) and participate in joint research cruises.

Prerequisites for employment include a dissertation of superior quality, a habilitation or an equivalent scientific achievement, and pedagogical aptitude proven by practical experience. Excellence in research is expected as well as international experience, generally attained by a research stay abroad. Successful acquisition of third-party funds is required.

To increase the proportion of women in science, equally qualified female candidates will be given preference. Applicants with disabilities will be preferentially considered in case of equal qualification. The position is suitable for part-time employment.

Applications should include a letter of interest, a curriculum vitae, lists of publications and third-party funds, statements on previous and planned research, teaching record and concepts, as well as copies of awards and degree certificates. Applications should be addressed to the director of the Institute of Chemistry and Biology of the Marine Environment (ICBM) at the Carl von Ossietzky University Oldenburg (director@icbm.de) and submitted as a single PDF document by email **no later than January 15th, 2019**.

Job Advertisement No. 26/2018

The **Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute** – (Leibniz-HKI, www.leibniz-hki.de) investigates the pathobiology of human-pathogenic fungi and identifies targets for the development of novel natural product-based antibiotics. The **Department of Microbial Pathogenicity Mechanisms** invites applications for one

Doctoral Researcher (f/m) (FunHoMic)

in the field of Microbiology / Infection Biology / Cellular Microbiology.

The project will be associated to the European Innovative Training Network (ITN) “Deciphering the fungus-host-microbiota interplay to improve the management of fungal infections – FunHoMic” within the Horizon2020 **Marie Skłodowska-Curie Actions** (starting 2019).

Project background – Fungi infect billions of people annually, kill as many people as tuberculosis or malaria and are a major problem for healthcare. *Candida albicans* is a major opportunistic fungal pathogen and frequently causes superficial or even fatal infections. However, most humans are asymptotically colonised by this fungus as a part of their commensal microbiota. We are a leading research group in the investigation of *Candida* spp. pathogenicity mechanisms including their interaction with immune cells, their nutrient acquisition strategies, their evolution and adaptation in pathogenicity, the mechanisms involved in the commensal-to-pathogen shift and their capacity to cause host damage (see: www.leibniz-hki.de/en/mpm).

In this project, the successful applicant will use our sophisticated *in vitro* and *ex vivo* model systems to investigate important aspects of *C. albicans*' interaction networks during commensalism and pathogenesis, focussing on the influence of human microbiota and probiotics on host-*Candida* interplay. The overarching goal is to elucidate the molecular mechanisms by which bacteria act as protective partners or antagonists of *C. albicans*.

Eligibility criteria – All applicants must be early-stage researchers of any nationality in the first four years of their research career. They are required to undertake transnational mobility and, *in the 3 years immediately prior to recruitment, must not have resided or carried out their main activity (work, studies, etc.) in Germany for more than 12 months*. The appointed researcher must not have spent more than 12 months in the 3 years immediately prior to their recruitment in the same appointing organisation.

Candidate's profile – We expect a Master's degree (or equivalent) in Life Sciences (e.g. Biology, Biochemistry, or Microbiology). Furthermore, the applicant should be able to perform team-oriented as well as independent work. Practical experiences in one or more of the following subjects are beneficial: Microbiology, Molecular Biology, Infection Biology, Cell Biology. Practical experience in cell culture, microarrays or fungal genetics is an advantage.

We offer – The successful candidate will be hosted at the Department MPM at the Leibniz-HKI. The institute is embedded in the outstanding scientific environment of the Beutenberg Campus providing state-of-art research facilities and a highly integrative network of life science groups. We offer a multifaceted scientific project with excellent technical facilities, a place in a young, committed team, as well as strong scientific collaborations. Furthermore, the successful candidates will take part in the extensive ITN training programmes. The length of individual appointments for an ESR will be at least 36 months within a network.

Salary is paid according to the regulations of the **Marie Skłodowska-Curie Actions**. HKI is an equal opportunity employer.

Further information: Prof. Bernhard Hube | +49 3641 532 1401 | career@leibniz-hki.de

Complete applications in English should include a CV, a complete list of publications, a brief statement of research experiences, the addresses of two possible referees, and should be submitted by **31.12.2018** via the [online application system](#) of the HKI.

Job Advertisement No. 25/2018

The **Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute** – (Leibniz-HKI, www.leibniz-hki.de) investigates the pathobiology of human-pathogenic fungi and identifies targets for the development of novel natural product-based antibiotics. The **Department of Microbial Pathogenicity Mechanisms** invites applications for one

Doctoral Researcher (f/m) (FungiNet)

in the field of Microbiology / Infection Biology / Cellular Microbiology.

The project will be co-financed by the Deutsche Forschungsgemeinschaft (DFG) and related to the CRC/TR 124 – FungiNet – Pathogenic fungi and their human host: Networks of interaction (see project C1 in: www.funginet.de).

Project background – Fungi infect billions of people annually, kill as many people as tuberculosis or malaria and are a major problem for healthcare. *Candida albicans* is a major opportunistic fungal pathogen and frequently causes superficial or even fatal infections. However, most humans are asymptotically colonised by this fungus as a part of their commensal microbiota. We are a leading research group in the investigation of *Candida* spp. pathogenicity mechanisms including their interaction with immune cells, their nutrient acquisition strategies, their evolution and adaptation in pathogenicity, the mechanisms involved in the commensal-to-pathogen shift and their capacity to cause host damage (see: www.leibniz-hki.de/en/mpm).

In this project, the successful applicant will use our sophisticated *in vitro* and *ex vivo* model systems to investigate important aspects of *C. albicans*' interaction networks during commensalism and pathogenesis, focussing on the direct interaction of *C. albicans* with host epithelial cells. The overarching goal is to elucidate the pathogenicity mechanisms which lead to host damage.

Candidate's profile – We expect a Master's degree (or equivalent) in Life Sciences (e.g. Biology, Biochemistry, or Microbiology). Furthermore, the applicant should be able to perform team-oriented as well as independent work. Practical experiences in one or more of the following subjects are beneficial: Microbiology, Molecular Biology, Infection Biology, Cell Biology. Practical experience in cell culture, microarrays or fungal genetics is an advantage.

We offer a doctoral researcher position for at least three years. The successful candidate will be hosted at the Department of Microbial Pathogenicity Mechanisms (MPM) at the Leibniz-HKI. The institute is embedded in the outstanding scientific environment of the Beutenberg Campus providing state-of-art research facilities and a highly integrative network of life science groups. We further offer a multifaceted scientific project with excellent technical facilities, a place in a young, committed team, as well as strong scientific collaborations. Furthermore, the successful candidate will be integrated into one of our graduate schools: ILRS (www.ilrs.de) or JSMC (www.jsmc.uni-jena.de) and will take part in the extensive local training programmes.

Salary is paid according to German TV-L (salary agreement for public service employees). HKI is an equal opportunity employer.

Further information: Prof. Bernhard Hube | +49 3641 532 1401 | career@leibniz-hki.de

Complete applications in English should include a CV, a complete list of publications, a brief statement of research experiences, the addresses of two possible referees, and should be submitted by **31.12.2018** via the [online application system](#) of the HKI.

Job Advertisement No. 24/2018

The **Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute –** (HKI, www.leibniz-hki.de) investigates the pathobiology of human-pathogenic fungi and identifies targets for the development of novel natural product-based antibiotics. The Department of **Infection Biology** invites applications for

Post Doctoral Researcher (m/f)

Successful candidates will investigate the field Complement Evasion of pathogenic microbes including in particular *Candida albicans* and *Aspergillus fumigatus*. Main topics of the project are

- Characterisation of fungal immune evasion proteins
- How do microbial immune evasion proteins influence innate and cellular immune response?
- Functional characterization of FHR5 recruitment by pathogenic microbes

For further details please see literature below:

Requirement: PhD degree in biology, genetics or life sciences. Experience, knowledge and good experimental skills in cell and molecular biology, genetics and biochemistry are of advantage.

For further information

Prof. Dr. Peter Zipfel | +49 3641 532 1300 | career@leibniz-hki.de

Applications

Salary is paid according to German TV-L (salary agreement for public service employees). As an equal opportunity employer the HKI is committed to increase the percentage of female scientists and therefore especially encourages them to apply.

Complete applications in English should include a letter of interest, curriculum vitae, a complete list of publications, brief statement of research experiences, a list of three potential references, full academic record (copies of degree certificates), and should be submitted by via the [online application](#) system until **15.12.2018**.

Literature:

Meinel C et al. (2017) *Streptococcus pneumoniae* from HUS patients bind human plasminogen via the surface protein PspC and use plasmin to damage human endothelial cells. *J Inf Dis* 21, 358-370.

Zipfel PF, Hallström T, Riesbeck K (2013) Pathogenic microbes - Tipping the balance. *Mol Immunol* 56, 152-160.

Zipfel PF, Skerka C (2009) Complement regulators and inhibitory proteins. *Nat Rev Immunol* 9, 729-740.

Dasari P, Shopova IA, Stroe M, Wartenberg D, Dahse H-M, Beyersdorf N, Hortschansky P, Dietrich S, Cseresnyés Z, Figge MT, Westermann M, Skerka C, Brakhage AA, Zipfel PF (2018) Asp2 from *Aspergillus fumigatus* recruits human immune regulators for immune evasion and cell damage. *Frontiers in Immunology* 9, 1635.

Luo S, Dasari P, Reiher N, Hartmann A, Jacksch S, Wende E, Barz D, Niemiec MJ, Jacobsen I, Beyersdorf N, Hünig T, Klos A, Skerka C, Zipfel PF (2018) The secreted *Candida albicans* protein Pra1 disrupts host defense by broadly targeting and blocking complement C3 and C3 activation fragments. *Mol Immunol* S0161-5890(17), 30440-30446.

Job Advertisement No. 23/2018

The **Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute –** (HKI, www.leibniz-hki.de) investigates the pathobiology of human-pathogenic fungi and identifies targets for the development of novel natural product-based antibiotics. The Department of **Infection Biology** invites applications for

Doctoral Researcher (m/f)

Successful candidates will investigate the field Complement Evasion of pathogenic microbes including *Candida albicans* and *Streptococcus pneumoniae*. Main topics of the project are

- Characterisation of fungal, pneumococcal and *Staphylococcus aureus* immune evasion proteins
- How do microbial proteins influence innate and cellular immune response?
- Functional characterization of FHR5 recruitment by pathogenic microbes

For further details please see literature below:

Requirement: PhD degree in biology, genetics or life sciences. Experience, knowledge and good experimental skills in cell and molecular biology, genetics and biochemistry are of advantage.

For further information

Prof. Dr. Peter Zipfel | +49 3641 532 1300 | career@leibniz-hki.de

Applications

Salary is paid according to German TV-L (salary agreement for public service employees). As an equal opportunity employer the HKI is committed to increase the percentage of female scientists and therefore especially encourages them to apply.

Complete applications in English should include a letter of interest, curriculum vitae, a complete list of publications, brief statement of research experiences, a list of three potential references, full academic record (copies of degree certificates), and should be submitted by via the [online application system](#) until **15.12.2018**.

Literature:

Meinel C et al. (2017) *Streptococcus pneumoniae* from HUS patients bind human plasminogen via the surface protein PspC and use plasmin to damage human endothelial cells. *J Inf Dis* 21, 358-370.

Zipfel PF, Hallström T, Riesbeck K (2013) Pathogenic microbes - Tipping the balance. *Mol Immunol* 56, 152-160.

Hallström T, Siegel C, Mörgelin M, Kraiczy P, Skerka C, Zipfel PF (2013) CspA from *Borrelia burgdorferi* inhibits the terminal complement pathway. *mBio* 4, pii: e00481-13.

Luo S, Hoffmann R, Skerka S, Zipfel PF (2013) Glycerol-3-phosphate Dehydrogenase 2 Is a Novel Factor H, FHL-1 and Plasminogen Binding Surface Protein of *Candida albicans*. *J Infect Dis* 207, 594-603.

Zipfel PF, Skerka C (2009) Complement regulators and inhibitory proteins. *Nat Rev Immunol* 9, 729-740.

Job Advertisement No. 22/2018

The **Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute –** (HKI, www.leibniz-hki.de) investigates the pathobiology of human-pathogenic fungi and identifies targets for the development of novel natural product-based antibiotics. Research Group **Systems Biology and Bioinformatics** invites talented and highly gifted candidates to apply for a

Post-Doctoral Researcher (m/f) Metagenomics

in the domain of metagenomics for developing novel therapeutic treatments for human diseases. The position is starting on 1st of January 2019 or soon after for two years initially with a possibility of extension.

The Systems Biology & Bioinformatics (SBI) group of Leibniz Institute for Natural Product Research and Infection Biology, Hans Knöll Institute Jena, Germany, is seeking one post-doctoral researcher in the domain of metagenomics for developing novel therapeutic treatments for human diseases. SBI is active participant of several national and international collaborative efforts to understand the role of gut microbiome in the onset and progression of metabolic diseases, cancer as well as infectious diseases. The successful candidate is expected to lead bioinformatics projects, develop bioinformatics pipelines and interact closely with wet-lab scientists for discovering microbiome-based therapeutics.

Your profile: A strong interest in conducting collaborative research on the topic outlined above is paramount. Candidates are expected to be interested in working at the boundaries of several research domains.

- PhD degree in Systems Biology, Computational Biology, Bioinformatics, Biophysics or a related discipline.
- Documented knowledge and experience in the analysis of biological high-throughput data is a requirement.
- Knowledge in statistical methods in the context of biological systems.
- Strong experience with programming (Python, Perl, C++, R).
- Well-developed collaborative skills.

We offer: The successful candidate will be hosted at the Systems Biology & Bioinformatics (SBI) group of Leibniz Institute for Natural Product Research and Infection Biology, Hans Knöll Institute. We offer an international and multi-disciplinary environment with the required qualifications and a strong expertise in the proposed research field. Currently the group consists of ~15 members at different levels of seniority; post-doctoral scientists, PhD students, master students, scientific co-workers. More information for the research output of the group in the field of systems biology can be found here:

<http://www.leibniz-hki.de/en/systembiologie-und-bioinformatik.html>

Salary is paid according to German TV-L (salary agreement for public service employees). As an equal opportunity employer the HKI is committed to increase the percentage of female scientists and therefore especially encourages them to apply.

For further information

Please contact Dr. Gianni Panagiotou | +49 3641 532 1759 | career@leibniz-hki.de

Applications

Complete applications in English should include a letter of interest, curriculum vitae, a complete list of publications, brief statement of research experiences, a list of three potential references, full academic record (copies of degree certificates), and should be submitted by via the [online application system](#).

Job Advertisement No. 21/2018

The **Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute –** (HKI, www.leibniz-hki.de) investigates the pathobiology of human-pathogenic fungi and identifies targets for the development of novel natural product-based antibiotics. Research Group **Systems Biology and Bioinformatics** invites talented and highly gifted candidates to apply for a

Post-Doctoral Researcher (m/f) in Bioinformatics

in the domain of genomics and/or metabolic modelling to develop novel therapeutic treatments for human diseases. The position is starting on 1st of January 2019 or soon after for two years with a possibility of extension.

The Systems Biology & Bioinformatics (SBI) group of Leibniz Institute for Natural Product Research and Infection Biology, Hans Knöll Institute Jena, Germany, is seeking one post-doctoral researcher in the domain of genomics and/or metabolic modelling to develop novel therapeutic treatments for human diseases. SBI is active participant of several national and international collaborative efforts to tackle infectious diseases. The successful candidate is expected to lead bioinformatics projects and develop bioinformatics pipelines for understanding infectious processes by pathogens. The successful candidate is expected to interact closely with wet-lab scientists for discovering new molecular mechanisms of pathogens.

Your profile: A strong interest in conducting collaborative research on the topic outlined above is paramount. Candidates are expected to be interested in working at the boundaries of several research domains.

- PhD degree in Systems Biology, Computational Biology, Bioinformatics, Biophysics, Computer Science or a related discipline.
- Knowledge and experience in the analysis of biological high-throughput data.
- Knowledge in statistical methods in the context of biological systems.
- Experience with programming (Python, Perl, C++, R).
- Well-developed collaborative skills

We offer: The successful candidate will be hosted at the Systems Biology & Bioinformatics (SBI) group of Leibniz Institute for Natural Product Research and Infection Biology, Hans Knöll Institute. We offer an international and multi-disciplinary environment with the required qualifications and a strong expertise in the proposed research field. Currently the group consists of ~15 members at different levels of seniority; post-doctoral scientists, PhD students, master students, scientific co-workers. More information for the research output of the group in the field of systems biology can be found here:

<http://www.leibniz-hki.de/en/systembiologie-und-bioinformatik.html>

Salary is paid according to German TV-L (salary agreement for public service employees). As an equal opportunity employer the HKI is committed to increase the percentage of female scientists and therefore especially encourages them to apply.

For further information

Please contact Dr. Gianni Panagiotou | +49 3641 532 1759 | career@leibniz-hki.de

Applications

Complete applications in English should include a letter of interest, curriculum vitae, a complete list of publications, brief statement of research experiences, a list of three potential references, full academic record (copies of degree certificates), and should be submitted by via the [online application system](#).

Job Advertisement No. 20/2018

The **Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute –** (HKI, www.leibniz-hki.de) investigates the pathobiology of human-pathogenic fungi and identifies targets for the development of novel natural product-based antibiotics. Research Group **Systems Biology and Bioinformatics** invites talented and highly gifted candidates to apply for a

Doctoral Researcher (m/f) in Bioinformatics

in the domain of genomics and/or metabolic modelling to develop novel therapeutic treatments for human diseases. The position is starting on 1st of January 2019 or soon after for three years.

The Systems Biology & Bioinformatics (SBI) group of Leibniz Institute for Natural Product Research and Infection Biology, Hans Knöll Institute Jena, Germany, is seeking one PhD candidate in the domain of genomics and/or metabolic modelling to develop novel therapeutic treatments for human diseases. SBI is active participant of several national and international collaborative efforts to tackle infectious diseases. The successful candidate is expected to lead bioinformatics projects and develop bioinformatics pipelines for understanding infectious processes by pathogens. The successful candidate is expected to interact closely with wet-lab scientists for discovering new molecular mechanisms of pathogens.

Your profile: A strong interest in conducting collaborative research on the topic outlined above is paramount. Candidates are expected to be interested in working at the boundaries of several research domains.

- MSc degree in Systems Biology, Computational Biology, Bioinformatics, Biophysics, Computer Science or a related discipline.
- Knowledge and experience in the analysis of biological high-throughput data.
- Knowledge in statistical methods in the context of biological systems.
- Experience with programming (Python, Perl, C++, R).
- Well-developed collaborative skills.

We offer: The successful candidate will be hosted at the Systems Biology & Bioinformatics (SBI) group of Leibniz Institute for Natural Product Research and Infection Biology, Hans Knöll Institute. We offer an international and multi-disciplinary environment with the required qualifications and a strong expertise in the proposed research field. Currently the group consists of ~15 members at different levels of seniority; post-doctoral scientists, PhD students, master students, scientific co-workers. More information for the research output of the group in the field of systems biology can be found here:

<http://www.leibniz-hki.de/en/systembiologie-und-bioinformatik.html>

Salary is paid according to German TV-L (salary agreement for public service employees). As an equal opportunity employer the HKI is committed to increase the percentage of female scientists and therefore especially encourages them to apply.

For further information

Please contact Dr. Gianni Panagiotou | +49 3641 532 1759 | career@leibniz-hki.de

Applications

Complete applications in English should include a letter of interest, curriculum vitae, a complete list of publications, brief statement of research experiences, a list of three potential references, full academic record (copies of degree certificates), and should be submitted by via the [online application system](#).

Job Advertisement No. 16/2018

The Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute – (HKI, www.leibniz-hki.de) investigates the pathobiology of human-pathogenic fungi and identifies targets for the development of novel natural product-based antibiotics. The independent research group of **Chemical Biology of Microbe-Host Interactions** invites applications for a

Post-doctoral Researcher (m/f)

The position is available from February 1, 2019 or soon after for two years initially.

Project title:

Analysis of cellular processes in a marine hydroid polyp using differential transcriptomics

Project Outline:

- (1) *in silico* analysis of available genome and transcriptome data of marine invertebrates
- (2) Comparative transcriptomic analysis (RNAseq) of different growth stages of a marine invertebrate

Our requirements: A strong interest in conducting collaborative research on the topic outlined above is paramount. Candidates are expected to be interested in working at the boundaries of several research domains.

- Very good theoretical and practical skills in bioinformatics and/or cellular biology of marine invertebrates
- The candidate should embrace working in a young international research team and conducting research that covers multiple biological disciplines
- A PhD degree in Life Sciences, Cell Biology and/or Computational Biology, Bioinformatics. Candidates about to obtain their degree are welcome to apply!
- An integrative and cooperative personality with enthusiasm for actively participating in a lively community of the HKI, the JSMC (www.jsmc.uni-jena.de) and ILRS (www.ilrs.de) community
- Very good communication and writing skills (English)

We offer an international and multi-disciplinary environment. Currently the group consists of ~10 members at different levels of seniority; post-doctoral scientists, PhD students, master students.

More information for the research output of the group can be found [here](#).

For further information please contact: [Dr. Christine Beemelmans \(career@leibniz-hki.de\)](mailto:career@leibniz-hki.de)

Complete applications in English should include a CV, certificates, transcripts, a brief statement of research experiences and interests and the contact details of two possible referees, and should be submitted via the **online application system** of the HKI. Final Deadline: **December 15, 2018**; but applications will be reviewed on a rolling basis.

Job Advertisement No. 17/2018

The Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute – (HKI, www.leibniz-hki.de) investigates the pathobiology of human-pathogenic fungi and identifies targets for the development of novel natural product-based antibiotics. The independent research group of **Chemical Biology of Microbe-Host Interactions** invites applications for a

Master's Thesis position

The position is available from February 1, 2019 or soon after.

Project title:

- (1) Synthesis of chiral building blocks for natural product synthesis
- (2) Synthesis of fluorescence-labeled bioactive natural products

Our requirements:

- Strong interest in synthetic chemistry and analytical chemistry.
- The candidate should embrace working in a young international research team and conducting research that covers multiple biological disciplines.
- Master Studies in Chemistry, Chemical Biology and/or Life Sciences.
- A personality with enthusiasm for actively participating in a lively community of the HKI, the JSMC (www.jsmc.uni-jena.de) and ILRS (www.ilrs.hki-jena.de) community.
- Very good communication and writing skills (English).

We offer an international and multi-disciplinary environment. Currently the group consists of ~10 members at different levels of seniority; post-doctoral scientists, PhD students, master students.

More information for the research output of the group can be found [here](#).

For further information please contact: [Dr. Christine Beemelmans \(career@leibniz-hki.de\)](mailto:career@leibniz-hki.de)

Complete applications in English should include a CV, certificates, transcripts, a brief statement of research experiences and interests and the contact details of two possible referees, and should be submitted via the **online application system** of the HKI. Deadline of applications: Applications will be reviewed on a rolling basis.

Job Advertisement No. 18/2018

The Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute – (HKI, www.leibniz-hki.de) investigates the pathobiology of human-pathogenic fungi and identifies targets for the development of novel natural product-based antibiotics. The independent research group of **Chemical Biology of Microbe-Host Interactions** invites applications for a

Post-doctoral Researcher (m/f)

The position is available from February 1, 2019 or soon after for two years initially.

Project title:

Microbial profiling of a marine invertebrate and genome mining of symbiotic bacteria

Project Outline:

- (1) Analysis of bacterial colonization during different developmental stages of a marine invertebrate using e.g. FISH;
- (2) Microbial profiling/metagenomic analysis of healthy vs. infected animals and young and adults to determine the stability of core microbiome and analysis of potential vertical transmission of (endo)symbionts;
- (3) Comparative genome mining of bacterial symbionts for natural product related secondary metabolite related biosynthetic gene clusters

Our requirements: A strong interest in conducting collaborative research on the topic outlined above is paramount. Candidates are expected to be interested in working at the boundaries of several research domains.

- Very good theoretical and practical skills in bioinformatics and microbiology
- The candidate should embrace working in a young international research team and conducting research that covers multiple biological disciplines
- A PhD degree in Life Sciences, and/or Computational Biology, Bioinformatics. Candidates about to obtain their degree are welcome to apply!
- An integrative and cooperative personality with enthusiasm for actively participating in a lively community of the HKI, the JSMC (www.jsmc.uni-jena.de) and ILRS (www.ilrs.de) community
- Very good communication and writing skills (English)

We offer an international and multi-disciplinary environment. Currently the group consists of ~10 members at different levels of seniority; post-doctoral scientists, PhD students, master students.

More information for the research output of the group can be found [here](#).

For further information please contact: [Dr. Christine Beemelmans \(career@leibniz-hki.de\)](mailto:career@leibniz-hki.de)

Complete applications in English should include a CV, certificates, transcripts, a brief statement of research experiences and interests and the contact details of two possible referees, and should be submitted via the **online application system** of the HKI. Final Deadline: **December 15, 2018**; but applications will be reviewed on a rolling basis.

Job Advertisement No. 12/2018

The **Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute – (HKI)** investigates the pathobiology of human-pathogenic fungi and identifies targets for the development of novel natural product-based antibiotics. The **Systems Biology & Bioinformatics (SBI)** group is seeking a

Post-doctoral Researcher (m/f)

in the domain of bioinformatics related to gut microbiome and infectious diseases. The SBI group uses a multidisciplinary approach, including -omics data integration, metabolic modelling, network biology, metagenomics and GWAS to develop novel therapeutic treatments for human diseases. SBI is active participant of several national collaborative efforts to tackle infectious diseases such as the *Jena School for Microbial Communication*, the *Centre for Innovation Competence CIC Septomics*, the *Centre for Sepsis Control and Care* and most importantly the only Collaborative Research Center in the field of infectious diseases, FungiNet. The successful candidate is expected to lead bioinformatics projects related mainly to metagenomics data analysis and develop bioinformatics pipelines for understanding infectious processes by pathogens. The successful candidate is expected to interact closely with wet-lab scientists for discovering new molecular mechanisms of pathogens using an iterative cycle that starts with experimental data, followed by data analysis and data integration to determine correlations between concentrations of molecules, and ends with the formulation of hypotheses that will be verified in functional experiments.

Your profile: A strong interest in conducting collaborative research on the topic outlined above is paramount. Candidates are expected to be interested in working at the boundaries of several research domains.

- PhD degree in Systems Biology, Computational Biology, Bioinformatics, Biophysics or a related discipline.
- Documented knowledge and experience in the analysis of biological high-throughput data is a requirement.
- Knowledge in statistical methods in the context of biological systems.
- Strong experience with programming (Python, Perl, C++, R).
- Well-developed collaborative skills.

We offer: The successful candidate will be hosted at the Systems Biology & Bioinformatics (SBI) group of Leibniz Institute for Natural Product Research and Infection Biology, Hans Knoell Institute. We offer an international and multi-disciplinary environment with the required qualifications and a strong expertise in the proposed research field. Currently the group consists of ~15 members at different levels of seniority; post-doctoral scientists, PhD students, master students, scientific co-workers. More information for the research output of the group in the field of systems biology can be found here: <http://www.leibniz-hki.de/en/systembiologie-und-bioinformatik.html>

The position is initially for 2 years with a possibility of extension and/or becoming permanent.

Further information:

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Complete applications in English should include a CV, certificates, transcripts, a brief statement of research experiences and interests, and the contact details of two possible referees and should be submitted via the [online application system](#) of the HKI. Deadline of applications: Applications will be reviewed on a rolling basis. Starting date: 1st of January 2019 or soon after.

