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## Employment

### Associate Professor

Section for Hologenomics

København K

30 Sep 2014 → nu

### Associate Professor

Section for Hologenomics

København K

1 Oct 2014 → nu

### Assistant Professor

Collections

København K

1 Oct 2018 → 10 Jan 2020

### Assistant Professor. at GeoGenetics

Research

København Ø

1 Jan 2020 → 29 Feb 2020

### Tenure-track assistant professor

Department of Agroecology, Aarhus University, Slagelse, Denmark.

1 Nov 2022 → nu

## Research outputs

### A simplified bacterial community found within the epidermis than at the epidermal surface of atopic dermatitis patients and healthy controls

Barnes, Christopher James, Asplund, M., Clausen, M., Rasmussen, Linett, Olesen, C. M., Yüksel, Y. T., Andersen, P. S., Litman, Thomas, Holmstrøm, K., Bay, Lene, Fritz, Blaine Gabriel, Bjarnsholt, Thomas, Agner, Tove & Hansen, Anders Johannes, 2023, In: BMC Microbiology. 23, 12 p., 273.

### Assembling genetic structure of *Gardenia remyi*, a critically endangered tree endemic to the Hawaiian Islands

Hansen, Kristina Egholm, Opgenorth, M., Flynn, T., Kennedy, B., Rønsted, Nina, Olofsson, Jill Katharina & Barnes, Christopher James, 2023, In: Conservation Science and Practice. 5, 10, 17 p., e13011.

### Exploring the polysaccharide composition of plant cell walls in succulent aloes

Isager Ahl, Louise, Pedersen, H. L., Jørgensen, Bodil, Willats, W. G. T., Grace, O. M., Barnes, Christopher James & Rønsted, Nina, 2023, In: Plants, People, Planet. 5, 3, p. 335-353 19 p.

**Leaf gel from several *Aloe* species shows anti-inflammatory properties through the inhibition of lipopolysaccharide (LPS) mediated activation of Toll-like receptor 4 (TLR4) signaling**

Isager Ahl, Louise, Schoeneburg, M. P., Harth, Lisa, Barnes, Christopher James, Woetmann, Anders & Rønsted, Nina, 2023, In: *Phytomedicine Plus*. 3, 1, 8 p., 100397.

**Altered Maturation of the Skin Microbiome in Infants with Atopic Dermatitis**

Olesen, C. M., Clausen, M. L., Agner, Tove, Asplund, M., Rasmussen, Linett, Yüksel, Y. T., Andersen, P. S., Litman, Thomas, Hansen, Anders Johannes & Barnes, Christopher James, 2022, In: *Acta Dermato-Venereologica*. 102, 7 p., adv00817.

**Metabarcoding of soil environmental DNA replicates plant community variation but not specificity**

Barnes, Christopher James, Nielsen, Ida Broman, Aagaard, A., Ejrnæs, R., Hansen, Anders Johannes & Frøslev, Tobias Guldberg, 2022, In: *Environmental DNA*. 4, 4, p. 732-746 15 p.

**Rhizosphere bacterial communities differ among traditional maize landraces**

Lund, M., Rasmussen, Jacob Agerbo, Ramos Madrigal, Jazmin, Sawers, R., Gilbert, M Thomas P & Barnes, Christopher James, 2022, In: *Environmental DNA*. 4, 6, p. 1241-1249 9 p.

**Temporal and Spatial Variation of the Skin-Associated Bacteria from Healthy Participants and Atopic Dermatitis Patients**

Barnes, Christopher James, Clausen, M., Asplund, M., Rasmussen, Linett, Olesen, C. M., Yüksel, Y. T., Andersen, P. S., Litman, Thomas, Hansen, Anders Johannes & Agner, Tove, 2022, In: *mSphere*. 7, 1, 14 p., e00917-21.

**The biodiversity effect of reduced tillage on soil microbiota**

Frøslev, Tobias Guldberg, Nielsen, Ida Broman, Santos, S. S., Barnes, Christopher James, Bruun, Hans Henrik & Ejrnæs, R., 2022, In: *Ambio*. 51, 4, p. 1022-1033 12 p.

**Variation in Germination Traits Inform Conservation Planning of Hawaii's Foundational 'Ōhi'a Trees**

Wolkis, Dustin Matthew, Walsh, Seana Kasey, Barnes, Christopher James, Stacy, E. A. & Rønsted, Nina, 2022, In: *Journal of Sustainable Forestry*. 41, 9, p. 861-877 17 p.

**Genomic and niche divergence in an Amazonian palm species complex**

Bacon, C. D., Roncal, J., Andermann, T., Barnes, Christopher James, Balslev, H., Gutiérrez-Pinto, N., Morales, H., Núñez-Avelleneda, L. A., Tunarosa, N. & Antonelli, A., 2021, In: *Botanical Journal of the Linnean Society*. 197, 4, p. 498-512

**Increased Bacterial Richness Associated With Lesions Within the *Porites* spp. of Vietnam**

Rasmussen, Linett, Barnes, Christopher James, Mak, Sarah Siu Tze, Kjartansdóttir, K. R., Hansen, T. A., Doan-Nhu, H., Nguyen-Ngoc, L., Frøslev, Tobias Guldberg, Hellström, M. & Hansen, Anders Johannes, 27 May 2020, In: *Frontiers in Ecology and Evolution*. 8, 151.

**Comparing DADA2 and OTU clustering approaches in studying the bacterial communities of atopic dermatitis**

Barnes, Christopher James, Rasmussen, Linett, Asplund, M., Knudsen, Steen Wilhelm, Clausen, M., Agner, Tove & Hansen, Anders Johannes, 2020, In: *Journal of Medical Microbiology*. 69, 11, p. 1293-1302 10 p.

**Exploring evolutionary theories of plant defence investment using field populations of the deadlly carrot**

Martinez-Swatson, K. A., Kjøller, Rasmus, Cozzi, F., Simonsen, H. T., Rønsted, Nina & Barnes, Christopher James, 2020, In: *Annals of Botany*. 125, 5, p. 737-750 14 p.

**Historical chemical annotations of *Cinchona* bark collections are comparable to results from current day High-Pressure Liquid Chromatography technologies**

Canales, Nataly Olivia Allasi, Gress Hansen, T. N., Cornett, Claus, Walker, K., Driver, F., Antonelli, A., Maldonado, C., Nesbitt, M., Barnes, Christopher James & Rønsted, Nina, 2020, In: *Journal of Ethnopharmacology*. 249, 14 p., 112375.

**Thapsigargin and induced chemical defence in *Thapsia garganica***

Martinez-Swatson, K., Quinonero-Lopez, C., Ernst, M., Rønsted, Nina, Barnes, Christopher James & Simonsen, H. T., 2020, In: *Chemoecology*. 30, 5, p. 255-267 13 p.

### **Tracing the trade of timber through aDNA and Sr isotopic analysis.**

Van Ham-Meert, A. P. F., Fernandez Diaz-Maroto, P., Waight, Tod, Barnes, Christopher James & Daly, Aoife Maeliosa, 2020.

### **Universal Dermal Microbiome in Human Skin**

Bay, Lene, Barnes, Christopher James, Fritz, Blaine Gabriel, Thorsen, Jonathan Jan Ilve, Restrup, M. E. M., Rasmussen, Linett, Sørensen, J. K., Hesselvig, A. B., Odgaard, Anders, Hansen, Anders Johannes & Bjarnsholt, Thomas, 2020, In: *mBio*. 11, 1, 13 p., e02945-19.

### **High-Throughput Sequencing-Based Investigation of Viruses in Human Cancers by Multienrichment Approach**

Mollerup, S., Asplund, M., Friis-Nielsen, J., Kjartansdóttir, K. R., Fridholm, H., Hansen, T. A., Herrera, J. A. R., Barnes, C. J., Jensen, R. H., Richter, S. R., Nielsen, I. B., Pietroni, C., Alquezar-Planas, D. E., Rey-Iglesia, A., Olsen, P. V. S., Rajpert-De Meyts, E., Groth-Pedersen, L., von Buchwald, C., Jensen, D. H., Gniadecki, R. & 20 others, Høgdall, Estrid Vilma Solyom, Langhoff, J. L., Pete, I., Vereczkey, I., Baranyai, Z., Dybkaer, K., Johnsen, H. E., Steiniche, T., Hokland, P., Rosenberg, Jacob, Baandrup, U., Sicheritz-Pontén, Thomas, Willerslev, Eske, Brunak, Søren, Lund, O., Mourier, T., Vinner, Lasse, Izarzugaza, J. M. G., Nielsen, L. P. & Hansen, Anders Johannes, 15 Oct 2019, In: *The Journal of Infectious Diseases*. 220, 8, p. 1312-1324

### **Biodiversity seen through the perspective of insects: 10 simple rules on methodological choices and experimental design for genomic studies**

Matos-Maraví, P., Ritter, C. D., Barnes, Christopher James, Nielsen, M., Olsson, U., Wahlberg, N., Marquina, D., Sääksjärvi, I. & Antonelli, A., 2019, In: *PeerJ*. 7, 31 p., e6727.

### **Fungal Planet description sheets: 868-950**

Crous, P. W., Carnegie, A. J., Wingfield, M. J., Sharma, R., Mughini, G., Noordeloos, M. E., Santini, A., Shouche, Y. S., Bezerra, J. D. P., Dima, B., Guarnaccia, V., Imrefi, I., Jurjevic, Z., Knapp, D. G., Kovacs, G. M., Magista, D., Perrone, G., Rama, T., Rebriv, Y. A., Shivas, R. G. & 151 others, Singh, S. M., Souza-Motta, C. M., Thangavel, R., Adhapure, N. N., Alexandrova, A. V., Alfenas, A. C., Alfenas, R. F., Alvarado, P., Alves, A. L., Andrade, D. A., Andrade, J. P., Barbosa, R. N., Barili, A., Barnes, Christopher James, Baseia, I. G., Bellanger, J. -, Berlanas, C., Bessette, A. E., Bessette, A. R., Biketova, A. Y., Bomfim, F. S., Brandrud, T. E., Bransgrove, K., Brito, A. C. Q., Cano-Lira, J. F., Cantillo, T., Cavalcanti, A. D., Cheewangkoon, R., Chikowski, R. S., Conforto, C., Cordeiro, T. R. L., Craine, J. D., Cruz, R., Damm, U., de Oliveira, R. J. V., de Souza, J. T., de Souza, H. G., Dearnaley, J. D. W., Dimitrov, R. A., Dovana, F., Erhard, A., Esteve-Raventos, F., Felix, C. R., Ferisin, G., Fernandes, R. A., Ferreira, R. J., Ferro, L. O., Figueiredo, C. N., Frank, J. L., Freire, K. T. L. S., Garcia, D., Gene, J., Gesiorska, A., Gibertoni, T. B., Gondra, R. A. G., Gouliamova, D. E., Gramaje, D., Guard, F., Gusmao, L. F. P., Haitook, S., Hirooka, Y., Houbraken, J., Hubka, V., Inamdar, A., Iturriaga, T., Iturrieta-Gonzalez, I., Jadan, M., Jiang, N., Justo, A., Kachalkin, A. V., Kapitonov, V. I., Karadelev, M., Karakehian, J., Kasuya, T., Kautmanova, I., Kruse, J., Kusan, I., Kuznetsova, T. A., Landell, M. F., Larsson, K. -, Lee, H. B., Lima, D. X., Lira, C. R. S., Machado, A. R., Madrid, H., Magalhaes, O. M. C., Majerova, H., Malysheva, E. F., Mapperson, R. R., Marbach, P. A. S., Martin, M. P., Martin-Sanz, A., Matocec, N., McTaggart, A. R., Mello, J. F., Melo, R. F. R., Mesic, A., Michereff, S. J., Miller, A. N., Minoshima, A., Molinero-Ruiz, L., Morozova, O. V., Mosoh, D., Nabe, M., Naik, R., Nara, K., Nascimento, S. S., Neves, R. P., Olariaga, I., Oliveira, R. L., Oliveira, T. G. L., Ono, T., Ordonez, M. E., Ottoni, A. D. M., Paiva, L. M., Pancorbo, F., Pant, B., Pawlowska, J., Peterson, S. W., Raudabaugh, D. B., Rodriguez-Andrade, E., Rubio, E., Rusevska, K., Santiago, A. L. C. M. A., Santos, A. C. S., Santos, C., Sazanova, N. A., Shah, S., Sharma, J., Silva, B. D. B., Siquier, J. L., Sonawane, M. S., Stchigel, A. M., Svetasheva, T., Tamakeaw, N., Telleria, M. T., Tiago, P. V., Tian, C. M., Tkalec, Z., Tomashevskaya, M. A., Truong, H. H., Vecherskii, M. V., Visagie, C. M., Vizzini, A., Yilmaz, N., Zmitrovich, I. V., Zvyagina, E. A., Boekhout, T., Kehlet, T., Læssøe, Thomas & Groenewald, J. Z., 2019, In: *Persoonia*. 42, p. 291-473

### **Locality or habitat? Exploring predictors of biodiversity in Amazonia**

Ritter, C. D., Zizka, A., Barnes, Christopher James, Nilsson, R. H., Roger, F. & Antonelli, A., 2019, In: *Ecography*. 42, 2, p. 321-333

### **Extreme rainfall affects assembly of the root-associated fungal community**

Barnes, Christopher James, van der Gast, C. J., McNamara, N. P., Rowe, R. & Bending, G. D., Dec 2018, In: *New Phytologist*. 220, 4, p. 1172-1184

### **High-throughput metabarcoding reveals the effect of physicochemical soil properties on soil and litter biodiversity and community turnover across Amazonia**

Ritter, C. D., Zizka, A., Roger, F., Tuomisto, H., Barnes, Christopher James, Nilsson, R. H. & Antonelli, A., 25 Sep 2018, In: *PeerJ*. 6, 24 p., e5661.

**Hundred fifty years of herbarium collections provide a reliable resource of volatile terpenoid profiles showing strong species effect in four medicinal species of *Salvia* across the Mediterranean**

Jafari Foutami, I., Mariager, T., Rinnan, Riikka, Barnes, Christopher James & Rønsted, Nina, 1 Jan 2018, In: *Frontiers in Plant Science*. 871, p. 1-15 1877.

**A Comparative Study on the Faecal Bacterial Community and Potential Zoonotic Bacteria of Muskoxen (*Ovibos moschatus*) in Northeast Greenland, Northwest Greenland and Norway**

Andersen-ranberg, E., Barnes, Christopher James, Rasmussen, Linett, Salgado-flores, A., Grøndahl, C., Mosbacher, J., Hansen, Anders Johannes, Sundset, M., Schmidt, N. & Sonne, C., 2018, In: *Microorganisms*. 6, 3, 21 p., 76.

**Untargeted metabolic profiling reveals geography as the strongest predictor of metabolic phenotypes of a cosmopolitan weed**

Iwanycki Ahlstrand, Natalie Eva, Havskov Reghev, N., Markussen, Bo, Hansen, Hans Chr. Bruun, Eiriksson, F., Thorsteinsdottir, M., Rønsted, Nina & Barnes, Christopher James, 2018, In: *Ecology and Evolution*. 8, 13, p. 6812-6826 15 p.

**Functional differences in the microbial processing of recent assimilates under two contrasting perennial bioenergy plantations**

Elias, D. M., Rowe, R. L., Pereira, M. G., Stott, A. W., Barnes, Christopher James, Bending, G. D. & McNamara, N. P., 2017, In: *Soil Biology and Biochemistry*. 114, p. 248-262 15 p.

**Helminth burden and ecological factors associated with alterations in wild host gastrointestinal microbiota**

Newbold, L. K., Burthe, S. J., Oliver, A. E., Gweon, H. S., Barnes, Christopher James, Daunt, F. & van der Gast, C. J., 2017, In: *I S M E Journal*. 11, 3, p. 663-675 13 p.

**Phylogeny predicts the quantity of antimalarial alkaloids within the iconic yellow *Cinchona* bark (Rubiaceae: *Cinchona calisaya*)**

Maldonado Goyzueta, C. B., Barnes, Christopher James, Cornett, Claus, Holmfred, Else Skovgaard, Hansen, S. H., Persson, C., Antonelli, A. & Rønsted, Nina, 2017, In: *Frontiers in Plant Science*. 8, 16 p., 391.

**Temporally variable geographical distance effects contribute to the assembly of root-associated fungal communities**

Barnes, Christopher James, van der Gast, C. J., Burns, C. A., McNamara, N. P. & Bending, G. D., 25 Feb 2016, In: *Frontiers in Microbiology*. 7, 13 p., 195.

**Domesticating deadly carrots: Predicting the biosynthetic pathway of thapsigargin for the treatment of solid tumors**

Martinez, K. A., Simonsen, H. T., Rønsted, Nina, Andersen, T. B., Barnes, Christopher James, Boughton, B. & Cozzi, F., 2016, In: *Planta Medica*. 81, S 01, p. S1-S381

**Spatio-Temporal Variation of Core and Satellite Arbuscular Mycorrhizal Fungus Communities in *Miscanthus giganteus***

Barnes, Christopher James, Burns, C. A., van der Gast, C. J., McNamara, N. P. & Bending, G. D., 2016, In: *Frontiers in Microbiology*. 7, 12 p., 1278.

**Unexpectedly high beta-diversity of root-associated fungal communities in the Bolivian Andes**

Barnes, Christopher James, Maldonado Goyzueta, C. B., Frøsløv, Tobias Guldborg, Antonelli, A. & Rønsted, Nina, 2016, In: *Frontiers in Microbiology*. 7, 13 p., 1377.