ISPP INTERNATIONAL SOCIETY FOR PLANT PATHOLOGY

PROMOTING WORLD-WIDE PLANT HEALTH AND FOOD SECURITY

INTERNATIONAL SOCIETY FOR PLANT PATHOLOGY

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THE JAKOB ERIKSSON PRIZE FOR PLANT PATHOLOGY - CALL FOR NOMINATIONS

JAKOB ERIKSSON PRIZE COMMISSION

The premier award for achievement in plant pathology, the Jakob Eriksson Prize, was established in 1923 to honor the memory of Jakob Eriksson, a prominent Swedish mycologist and plant pathologist who died in 1931. He was also a dedicated internationalist who espoused the cause of international cooperation in plant pathology. The Prize will be awarded at the International Congress of Plant Pathology held on the Gold Coast, Queensland, Australia from 19-25 August 2028 (https://www.icpp2028.org/). The Royal Swedish Academy of Sciences administers the Jakob Eriksson Prize Fund which provides for a gold medal award at Congresses of the International Society for Plant Pathology.

Nominations are solicited for a candidate of distinction in recognition of research in mycology, in plant pathology, or in virus diseases, or of a particular publication dealing with such subjects, with the understanding that the work being recognised is of a distinct international value and merit.

The following rules apply to those making nominations:

i. Nominators must provide a short statement (2 pages or 500 words) justifying the selection of the nominee plus a short CV maximum three pages, and a publication list of the most relevant papers/publications or reports – maximum 20 references. Do not send a detailed Curriculum Vitae. More detail than these requirements will be sought by the Commission if required.
ii. Names of all nominees must be strictly confidential,
iii. Individuals cannot nominate themselves and nominators should declare any professional affiliation with the nominee.
iv. No correspondence concerning unsuccessful nominations will be entered into.

All nominations are to be sent to the Chair of the Prize Commission, in an email headed "Jakob Eriksson Prize Nomination 2028". Send the email to ErikssonPrize@ISPPweb.org with a c.c. to the ISPP Business Manager (andrea.masino@unito.it). The call for nominations will now close on 15 March 2027.

Prize Selection

i. The Jakob Eriksson Prize Commission, in consultation with the Executive of ISPP, will independently undertake the selection processes to enable a recommendation of the Jakob Eriksson Prize recipient at least one year before each International Congress of Plant Pathology.
ii. The Chair of the Commission will advise the ISPP President of the Commission's recommendation, and after appropriate deliberation, the President of the ISPP will invite the successful nominee to accept the award.

The Prize Ceremony

i. The participation of the Jakob Eriksson Prize recipient in the International Congress of Plant Pathology will be facilitated by the ISPP and the Congress Organisers. Normally this will include complementary Congress registration and attendance at Congress social functions, return economy travel to the Congress and some support for accommodation and reasonable expenses for the duration of the Congress.
ii. The Prize Ceremony will be planned by the ISPP in consultation with the Prize recipient, the Commission Chair and the Congress Organisers.
iii. As part of the Prize Ceremony, the Prize recipient will also be invited to briefly present their work at the Congress as The Jakob Eriksson Oration with scope and coverage in a style suitable for a more general audience.

The Royal Swedish Academy of Sciences will provide the Jakob Eriksson gold medal.

Information about the selection process is available here (https://www.isppweb.org/about_eriksson_2.asp).

Jacob Eriksson Prize - 1993-2023

Past recipients of the Prize are:

- 1993. 7th Recipient - Prof Dr Ir Ariena H.C. van Bruggen, Professor Biological Farming Systems at Wageningen University, at the 6th International Congress of Plant Pathology.
- 1998. 8th Recipient - Dr Richard Frederiksen, Professor of Plant Pathology at Texas A&M University, at the 7th International Congress of Plant Pathology in Edinburgh.
- 2003. 9th Recipient - Dr. Jaccov Katan of the Hebrew University, Jerusalem, at the 8th International Congress of Plant Pathology in Christchurch, New Zealand.
- 2008. 10th Recipient - Dr. Laurence V. Madden of the Ohio State University, at the 9th International Congress of Plant Pathology in Torino, Italy.
- 2013. 11th Recipient - Professor Jeffrey B. Jones of the University of Florida at the 10th International Congress of Plant Pathology in Beijing, China.
- 2018. 12th Recipient – Emeritus Professor Pierre JGM de Wit of the Laboratory of Phytopathology, Wageningen University, the Netherlands, at the 11th International Congress of Plant Pathology in Boston, USA.
- 2023. 13th Recipient – Professor Silvia Restrepo of the Universidad de los Andes, Bogota, Colombia, at the 12th International Congress of Plant Pathology in Lyon, France.



CALL FOR ROUNDTABLE DISCUSSIONS AND COMMITTEE MEETINGS AT THE ICPP2028

ANDREW GEERING, CONVENOR OF ICPP 2028 & VICE PRESIDENT OF ISPP

The response to our first call for Symposium and Satellite Meeting Proposals for ICPP 2028 has been very encouraging. With more than a month to go before the deadline, there is still plenty of time to submit your ideas. Filling out the online form takes less than an hour, so please keep your proposals coming via the official website at www.icpp2028.org.

In addition to these sessions, I am pleased to announce that calls for roundtable discussions and committee meetings are now officially open.

We recognise that ICPP 2028 will bring together a premier global gathering of plant pathologists, offering a unique opportunity to connect and collaborate. If your group, network, or committee would like to take advantage of this event to hold a meeting or lead a focused discussion, please let us know your requirements. The organising committee will work to secure and allocate appropriate venue spaces at the Gold Coast Convention Centre for you.

Thank you for your continued engagement, and we look forward to reviewing your proposals!

Best wishes,

Andrew Geering

Convenor, ICPP 2028

Vice President, International Society of Plant Pathology

INVITATION TO JOIN THE CROP LOSS SUBJECT MATTER COMMITTEE OF THE INTERNATIONAL SOCIETY OF PLANT PATHOLOGY

ANDREA FICKE, CHAIR OF THE ISPP CROP LOSS SMC

The Crop Loss SMC would like to cordially invite members of the various National Plant Pathology Societies of the International Society of Plant Pathology to join their activities.

With this invitation, we would like to encourage scientists interested in crop and forest losses due to diseases to join this subject matter committee and help develop a global, open, and collaborative crop and forest loss database to address a major knowledge gap in our profession. Each individual contribution to the proposed collective work would be fully recognised, whether in electronic/web-based outputs or in formal publications, in the same manner as previous efforts of this kind which the Crop Loss SMC has conducted.

Collection, curation and interpretation of crop loss data are essential activities for justifying meaningful, targeted research in our profession and advancing the impact of plant pathology. Crop and forest loss information is also the foundation of sustainable, integrated disease management. To ensure that the global crop loss database, which the Crop Loss SMC would generate, would accurately reflect the situation in global agricultural production areas, we are actively seeking the engagement of scientists working on crop loss estimates from the global South and North-East, as these regions are currently under-represented in our committee.

The Crop Loss SMC was established in 2013 and remains an active committee that organises online meetings and in-person workshops focused on crop loss research, including methods for crop loss assessment, establishing a freely accessible global crop loss database and encouraging scientific exchange on this matter across the international scientific community.

We also are currently considering topics for round table discussions and scientific sessions at the ICPP in 2028.

We would greatly appreciate your assistance in sharing this invitation with any members of the plant pathology community interested in crop losses. Only an international, inter-society, collective effort may succeed in the endeavour that we have in mind. Interested scientists can contact Andrea Ficke directly at andrea.ficke@nibio.no with their name, affiliation and crops of interest, so we can add them to our mailing list for the Crop Loss committee and include them in our activities.

A SYNTHESIS OF METHODS TO ASSESS CROP LOSSES CAUSED BY PLANT DISEASES

S. SAVARY, L. AMORIM, A. PETSAKOS, L. WILLOCQUET, OCTOBER 2026

A new report of the Global Plant Health Assessment Project to the Crop Loss Assessment Subject Matter Committee and to the Executive Committee of the ISPP was published in October 2026.

Much is written today on the losses caused by plant pathogens. Plant diseases are a cause for massive losses in quantity and quality of harvests; new technologies are increasingly reported in the literature, which might assist in quantifying these losses; and the literature indicates a drift in concepts and in semanatic, while suggesting that methods are readily available. This report addresses briefly these points, emphasising the assessment methods that could globally be shared by the scientific community.

The report rapidly synthesises the reasons why crop loss information is useful, and who uses it. It especially emphasises the fact that, as a topic, crop loss assessment constitutes a bridge between plant pathology and a number of science fields, as well as an interface with decision-making and policy design: as such, plant pathology has much to deliver to society through accurate, reliable, crop loss data. In order to achieve this, reliable methods are needed to assess crop losses caused by plant diseases. These methods also need to be shareable globally amongst plant pathologists and across disciplinary fields. It also seem that crop loss assessment is commonly seen as an impossible task, which involves a large yet unknown number of elements. This perception acts as a deterrent toward efforts to gather information which is acutely needed. This report attempts to dispel this perception, first in insisting that methods exist, and second in showing that pathways toward success can be designed.

A last section of the report points at a few areas where research on crop loss is an exciting scientific endeavour. These areas concern the quantification of mycotoxins in harvests; the combination of disease injuries in injury profiles which affect crop performances in complex ways; the dynamics of pathogens within, and as part of, plant microbiomes – phytobiomes; the interaction of plant pathogens, and the phytobiome, with abiotic, plant physiological, stresses; and the development and use of an open-access, free, crop loss data base curated by plant pathologists. Overlapping these themes is the critically important, and so scientifically valid, question of the future of plant health — its consequences on crop performances of the future – in a world where climate, societies, and agricultural systems, are changing rapidly.

Although this report cites a number of references, this text is not meant to be a review, and the references are intended only for the reader's convenience and encourage further investigation.

The report is avialable to download here: https://www.isppweb.org/about_gpha.asp

RESEARCHERS TO STUDY PLANT DISEASE ABOARD THE INTERNATIONAL SPACE STATION

EMILY HINDS, UNIVERSITY OF FLORIDA NEWS, 28 OCTOBER 2026



As NASA and its partners prepare for longer human missions beyond Earth, University of Florida researchers are investigating a challenge that could affect astronauts' ability to grow fresh food in space: plant disease. The university's MVP-Plant-02 investigation, launched to the International Space Station on 13th October, will examine how plants respond to a fungal plant pathogen in microgravity. The research will help scientists determine whether the space environment changes a plant's defenses against disease and could make infections more severe.

Led by UF/IFAS researchers Andrew C. Schuerger, Ph.D., Robert Ferl, Ph.D., and Anna-Lisa Paul, Ph.D., the investigation brings together expertise in plant pathology and plant physiology from across UF's Institute of Food and Agricultural Sciences. The Science Team members are combining decades of experience studying how phytopathogens develop on vegetable crops, and how plants grow and respond to the space environment.

The research also advances the University of Florida's broader commitment to space science through the Astraeus Space Institute, which connects the university's expertise across disciplines to address challenges in space exploration.

"As humanity begins to establish bases on the Moon and Mars, crews will benefit from the production of fresh fruits and vegetables in habitats called bioregenerative life support systems," Schuerger said. "Wherever plants and humans go, plant pathogens are soon to follow."

Bioregenerative life support systems use plants and other biological processes to help provide food and regenerate essential resources, including oxygen and water. Such systems could reduce astronauts' dependence on supplies transported from Earth, but they will need to remain productive and healthy over extended missions. Understanding how plant diseases develop in space is an important step toward making those systems reliable.

STUDYING PLANT DEFENSES IN MICROGRAVITY

MVP-Plant-02 will examine the interaction between *Arabidopsis thaliana*, a small flowering plant related to mustard, and *Golovinomyces cichoracearum*, a fungus that causes powdery mildew.

The team will investigate whether the fungus develops more aggressively in microgravity and how the plant's gene activities change as the disease progresses. By studying both disease development and gene expression, researchers hope to better understand the biological processes underlying plant responses to infection in space.

The investigation will use the Multi-Use Variable-g Platform, or MVP, a system developed by Redwire Space Technologies Inc. that enables experiments aboard the space station to be conducted under different gravity

conditions. Researchers will compare plants grown in microgravity with plants maintained at Earth-like gravity aboard the station, as well as a separate ground control at Kennedy Space Center.

This approach will allow the team to distinguish the effects of microgravity from other factors associated with growing plants in space. The experiment also introduces an important advance in space-based plant pathology: researchers will inoculate plants with the fungal phytopathogen after the plants are already in space. To accomplish this, the Redwire and UF team developed the Conidia Application Device, a specialised system for applying fungal spores to plant canopies during spaceflight.

"Since we get to grow plants in microgravity from seed, all plant defense mechanisms have been suppressed or turned on by microgravity before the spores land on plant tissues," Schuerger said. "It is a much better test than inoculating seedlings on the ground before launch."

Applying the pathogen after the plants have experienced microgravity allows researchers to investigate how the space environment affects plant biology before infection begins. Previous space-based plant disease research applied the pathogen before launch.

Kylee Soltez, a UF master's degree graduate and member of the science team, helped identify the significance of the new approach and the device's role in the investigation. "The Plant-02 team developed the first plant pathogen inoculation device for use in spaceflight," Soltez said in describing the experiment's distinction from previous research. "The Conidia Application Device will allow astronauts to perform sterile ejections of powdery mildew spores onto *Arabidopsis canopies*, all within a closed system."

Soltez's participation also reflects the project's role in preparing the next generation of scientists to conduct research at the intersection of plant health and space exploration.

BUILDING ON UF'S LEADERSHIP IN SPACE BIOLOGY

MVP-Plant-02 draws on complementary strengths within UF/IFAS. Schuerger brings more than four decades of experience developing integrated disease management strategies for plants grown in greenhouses and biological life support systems. Ferl and Paul have also brought decades of space biology experience and have led extensive research into plant growth and gene expression in space.

Their collaboration combines plant pathology — the study of plant diseases and their causes — with plant physiology and molecular biology to investigate not only whether disease occurs, but also how plants respond at the genetic level.

The project was developed at UF with support from NASA's Space Biology program and is being conducted in partnership with Redwire, which manages the MVP platform used for the investigation. The UF electron microscopy and plant molecular biology laboratories also provided critical technical support during postflight analysis.

The results could help scientists determine whether plant disease management strategies designed for Earth-based agriculture will need to be adapted for space. If disease proves more aggressive in microgravity, researchers could use these findings to develop preventive measures for future lunar and Martian habitats.

The investigation will also help establish that complex plant-pathogen experiments can be conducted aboard the space station, opening opportunities for additional research into the biological challenges of growing food beyond Earth.

WHAT COMES NEXT

During the mission, researchers expect to receive images from a subset of the plant growth modules, allowing the team to monitor plant development. However, determining whether microgravity changes disease severity and plant gene expression will require detailed analysis of the experimental material once it is returned to Earth.

For UF researchers, the investigation represents both a scientific milestone and an opportunity to expand the university's contributions to space biology. By bringing together expertise in plant pathology, horticultural sciences and space research, the team is working toward a future in which astronauts can grow healthy plants — and produce fresh food — during missions far from Earth.

THE SILENT PANDEMIC: HOW CLIMATE CHANGE IS UNLEASHING NEW FUNGAL PLANT PATHOGEN THREATS

A review by Sajeewa S. N. Maharachchikumbura *et al.* titled "The silent pandemic: How climate change is unleashing new fungal plant pathogen threats" was published on 16 September 2026 by *Plant Pathology* (Vol. 75, Issue 5, e70277). The abstract is as follows:-

Climate change is reshaping agricultural ecosystems and has become a major force of the emergence, evolution and spread of fungal pathogens affecting crops worldwide. Rising temperatures and atmospheric carbon dioxide, altered rainfall patterns and more frequent extreme weather events are changing host–pathogen–environment interactions. These shifts can enhance pathogen survival, dispersal and establishment in new regions, while accelerating adaptation through increased thermotolerance, virulence and fungicide resistance. As a result, fungal diseases are becoming more frequent, severe and difficult to manage, threatening food security and agricultural sustainability. This review synthesises current knowledge on how climate change promotes new fungal threats and alters the epidemiology of established diseases in major cropping systems. It highlights the roles of temperature, rainfall, humidity and elevated CO_2 in influencing fungal pathogenicity, host susceptibility and disease outcomes. Case studies of important diseases, including Fusarium head blight, potato late blight and wheat stripe rust, show how changing environmental conditions are intensifying disease pressure, reducing yields and increasing mycotoxin risks. The review also examines mechanisms of pathogen adaptation, including genetic plasticity, rapid mutation and selection for fungicide resistance, which further complicate management. In addition, it discusses the limitations of conventional control measures under changing climates and emphasises the need for integrated responses. These include breeding climate-resilient and disease-resistant cultivars, improving forecasting and early detection systems and promoting sustainable crop protection practices. Strengthening these approaches will be essential to reduce the impacts of climate-driven fungal diseases and support resilient food production systems in a warming world.

Read paper.

GLOBAL CHOCOLATE SUPPLY THREATENED BY DISEASE, NEW CACAO PLANT OFFERS SOLUTION

ADRIENNE BERARD, PENN STATE NEWS, 27 OCTOBER 2026

Chocolate lovers may not realise it, but the future of one of the world's most popular foods is increasingly under pressure. Diseases, shifting weather patterns and other environmental stressors are threatening cacao production globally, contributing to supply concerns and economic challenges for the millions of farmers who grow the crop that makes chocolate possible.



The oomycete disease black pod rot, shown here in cacao seed pods, is a serious problem in all areas of the world where the crop is grown. Caused by the oomycete *Phytophthora palmivora*, black pod rot causes pod losses of up to 30% and kills as many as 10% of the trees annually. Researchers hope to breed disease-resistant trees, and finding the cacao flowering gene promises to speed up their efforts (Photo credit: PlantVillage, Penn State. All Rights Reserved).

Now, after decades of research, Penn State scientists have developed a new disease-tolerant variety of cacao — and they said it has the potential to fundamentally change the chocolate industry. The new cacao variety builds on decades of research led by Mark Guiltinan, J. Franklin Styer Professor of Horticultural Botany and professor of plant molecular biology in the Department of Plant Sciences at Penn State's College of Agricultural Sciences, and Siela Maximova, research professor of plant biotechnology in the same department.

"For consumers, chocolate is something they expect to find on store shelves every day, but behind that product is a crop and industry facing significant challenges," Guiltinan said. "Our goal is to develop tools that help growers continue producing cacao sustainably and profitably."

Penn State's Program in the Molecular Biology of Cocoa, which Guiltinan and Maximova co-direct, traces its roots to an industry-supported endowment established in the 1980s. Since then, researchers at the University have developed foundational tools for cacao biotechnology, mapped important genetic pathways, and built one of the world's leading cacao research programs.

The University recently entered into a licensing agreement with AgroNetica, a cacao-focused biotechnology company, to work toward bringing the plant to growers worldwide. The company will advance field testing of the plants with the goal of eventually marketing the plant directly to growers, helping address some of the most significant threats facing global chocolate production.

The AgroNetica agreement represents a new chapter in the University's effort to understand and improve cacao, Maximova said, one focused on translating discoveries into technologies that can help growers, strengthen supply chains and support the future of chocolate production. "Thanks to this long-term investment in research and maintaining a sustained program, we now have an opportunity to begin getting technologies developed here in the lab closer to the hands of farmers," Maximova said. "The focus was always on helping cacao farmers and the industry. We're now at the place where we have a partner whose expertise is moving these discoveries into real-world use."

According to Guiltinan, this new commercialisation opportunity is particularly important as cacao production worldwide faces mounting threats from disease, climate variability, and changing environmental conditions that jeopardise both grower livelihoods and supply chains.

Black pod disease, an especially destructive disease caused by a mold-like pathogen (oomycete), alone is estimated to cause yield losses of roughly 30% worldwide, he said, while climate-related stresses continue to threaten production in major cacao-growing regions.

Native to the Amazon rainforest, cacao evolved as an understory tree growing beneath a tropical forest canopy. Today, it is cultivated across tropical regions in Africa, Asia and Latin America, often under environmental conditions that are very different from those in which the species evolved.

"Cacao evolved in a very stable rainforest environment," Guiltinan said. "It's a delicate plant in many ways. Changes in rainfall, temperature and humidity can all affect production, and some of those changes can also increase disease pressure."

Traditional cacao breeding is notoriously slow. Maximova explained that developing and evaluating new varieties can take decades because cacao trees require roughly three years to mature and produce seed. That slow rate of growth means climate change is an especially dangerous threat to its survival, she added. Not only are environmental conditions shifting faster than plants can evolve, but increased humidity and weather variability can create favorable conditions for pathogens and insect pests.

"The climate is changing faster than these trees can naturally adapt," she said. "One of our goals is to develop tools that help breeders respond more quickly to those challenges."

In a study published in the *Plant Biotechnology Journal*, the researchers combined advanced genetic tools such as genome sequencing and editing with traditional plant breeding to create a cacao plant with significantly improved resistance to black pod disease.

Using gene editing technology (CRISPR), the scientists modified a cacao gene known as TcNPR3, which acts as a natural brake on the plant's immune system. The mutation partially activates the plant's defense response, increasing its defenses against subsequent pathogen infection. After introducing the desired edit, researchers bred the plants to remove all transgenic material, or foreign DNA associated with the gene-editing machinery, leaving only the beneficial genetic change.

The result was a cacao plant carrying a precise genetic modification for disease tolerance, but no longer considered a genetically modified organism or GMO, consistent with U.S. and European Union regulatory frameworks that treat certain gene-edited traits similarly to those developed through conventional breeding.

"In one case, we only changed two bases in the entire genome of the plant," Guiltinan said. "Out of roughly 450 million bases, that single change resulted in about a 42% reduction in disease under laboratory conditions."

Although the edited plants have shown promising results in laboratory testing, the researchers emphasised that further work is needed before growers could plant them commercially. Field evaluations are underway through collaborations with the U.S. Department of Agriculture in Hawaii and Puerto Rico, where researchers will assess performance under real growing conditions.



Young cacao trees growing in the experiment in one of Penn State's plant science greenhouses (Photo credit: Francisco Menéndez-Burns / Penn State. All Rights Reserved).

"These plants are specifically designed to improve disease resistance," Maximova said. "The next step is proving performance in field trials. Scale-up and marketing will be the next challenges should the field testing prove encouraging. That's where commercial partners can play an important role in helping move the technology forward."

She noted that commercialisation of improved cacao varieties requires substantial investment, beyond what universities are designed to provide.

That's where AgroNetica comes in. The company recently licensed the commercial rights to the plants carrying the mutation for disease tolerance. AgroNetica has a plan to test, scale up and sell new varieties of cacao with improved traits for more sustainable production in cacao-growing countries. The company also plans to introduce additional traits from its development pipeline aimed at improving heat and drought resilience, reducing cadmium accumulation, enabling more compact plant architecture and greater mechanisation, accelerating time to first harvest, and developing caffeine-free cacao varieties.

"It takes millions of dollars and many years to bring a new crop variety to farmers," Maximova said. "That's why partnerships with companies willing to invest in development, testing and deployment are so important."

While the licensed technology focuses on resistance to disease, Maximova and Guiltinan are also studying traits related to climate resilience and crop productivity. Accelerated breeding and genome editing will become increasingly important tools as environmental pressures on cacao production continue to grow, they explained.

"The diseases are changing. The climate is changing. The challenges growers face continue to evolve," Maximova said. "This is not something you solve once and then you're finished. It's an ongoing effort to develop better plants and provide growers with new options."

For Guiltinan, the licensing agreement represents more than a commercial milestone. It is evidence that long-term university research can lead to tangible benefits for agriculture.

"We're trying to solve real problems for farmers," he said. "If we can help growers reduce losses, improve productivity and adapt more quickly to changing conditions, then that's the ultimate measure of success."

VIRULENCE DETERMINANTS OF FUSARIUM OXYSPORUM FOR CLINICAL INFECTIONS

A review by Jeffrey J. Coleman *et al.* titled "Virulence determinants of *Fusarium oxysporum* for clinical infections" was published on 1 October 2026 by *PLOS Pathogens* (Vol. 22, Issue 10, e1014630). The abstract is as follows:-

Fusarium oxysporum—recognized by the World Health Organization as a high-priority fungal pathogen—causes invasive and localized clinical infections such as keratitis and disseminated fusariosis, primarily driven by isolates from the F. oxysporum species complex (FOSC).

Key Virulence Determinants in Clinical Infections:

The molecular pathogenesis of F. oxysporum in mammalian hosts involves several core functional groups:

- Cellular Signaling & Regulation: Transcription factors and signaling pathways (such as the velvet complex governing development and stress responses, and white-collar photoreceptors) coordinate adaptation and virulence inside mammalian environments.
- Secreted Effectors and Secondary Metabolites: Bioactive secondary metabolites like fusaric acid contribute directly to toxicity and pathogenesis in mammalian hosts.
- Heavy Metal and Stress Homeostasis: Regulatory proteins (such as PacC homologs encoded on accessory chromosomes) help the fungus maintain pH and metal ion homeostasis under host immune attack.
- Thermotolerance and Environmental Adaptation: Unlike strict plant-adapted strains, clinical isolates demonstrate higher tolerance to elevated core temperatures and host physiological stressors.
- Accessory Chromosomes: While traditional virulence studies focus on core chromosomal housekeeping and signaling genes, region-specific accessory chromosomes in clinical isolates carry specialized adaptive and putative pathogenicity factors.

Read paper.

CURRENT VACANCIES

Assistant or Associate Professor – Cereal and Flax Crop Pathologist – Plant Health and Microbiomes, University of Saskatchewan, Canada

The Crop Development Centre (CDC) in the Department of Plant Sciences at the University of Saskatchewan is recruiting an Assistant or Associate Professor in Cereal and Flax Crop Pathology. The continuing-status (tenure-track-equivalent) position will focus on small-grain cereals, including wheat, barley, oat and canary seed (85%), and flax (15%). The annual salary ranges are CAD$113,527–135,535 for Assistant Professor and CAD$135,535–157,543 for Associate Professor.

The successful candidate will lead an established cereal and flax pathology program and develop an internationally recognised, externally funded research program addressing priority crop diseases. Working closely with CDC breeders, the appointee will manage disease nurseries, evaluate germplasm and breeding lines for disease resistance, and integrate field, greenhouse, laboratory and molecular approaches to improve disease resistance and accelerate variety development.

The appointee will contribute to undergraduate and graduate teaching, supervise MSc and PhD students, mentor postdoctoral researchers, and undertake outreach with growers, industry and government. Applicants must hold a PhD in plant pathology or a related discipline, with expertise in applied and molecular plant pathology, disease resistance genetics and crop improvement.

Applications should be received by 20 November 2026 for best consideration.

More information and applications: : https://www.isppweb.org/Ads/USaskCerealFlaxPathology.pdf.

Assistant Professor of Plant Pathology – Plant Health and Microbiomes, University of California, Davis, USA

The Department of Plant Pathology in the College of Agricultural and Environmental Sciences at the University of California, Davis is recruiting a tenure-track Assistant Professor of Plant Pathology, with an emphasis on plant health and microbiomes. The academic-year (9-month) appointment includes a role in the California Agricultural Experiment Station. The salary range is US$106,800–130,700 per year.

The successful candidate is expected to establish a competitive, externally funded research program in plant microbiome science addressing critical and emerging issues in plant pathology. Research should advance microbiome-informed approaches to the diagnosis, prediction and/or management of plant diseases and may include disease-suppressive microbiomes, pathobiomes, host–microbiome–pathogen interactions, disease complexes, microbiome engineering, synthetic communities, and climate-driven changes in plant–microbiome interactions.

The appointee will contribute to undergraduate and graduate teaching, including courses in microbiomes, Global Disease Biology, One Health, plant pathogen ecology and epidemiology, and microbial ecology. Graduate and undergraduate mentoring, outreach, and departmental and university service are also expected.

More information and applications:
https://www.isppweb.org/Ads/PlantPathology_AssistantProfessor_CaliforniaDavis.pdf.

ACKNOWLEDGEMENTS

Thanks to Andrea Ficke, Andrew Geering, Greg Johnson, Jan Leach, and Serge Savary for contributions.

COMING EVENTS

International Phytobiomes Conference 2026
3 November – 5 November, 2026
Niagara-on-the-Lake, Ontario, Canada
Website: https://phytobiomesconference.org/

International Plant and Animal Genome Meetings (PAG34)
8 January – 12 January, 2027
San Diego, California, USA
Website: https://intlpag.org/PAG/

72nd Conference on Soilborne Plant Pathogens and 57th California Nematology Workshop
15 March – 17 March, 2027
Cal Poly San Luis Obispo, California, USA
Website: soilborneplantpathogens.org

XXI International Plant Protection Congress (IPPC) 2027 in conjunction with 26th Australasian Plant Pathology Conference (APPC)
1 November – 5 November, 2027
Te Pae Christchurch Convention Centre, Christchurch, New Zealand
Website: www.ippc2027.com

18th International Congress of the Mediterranean Phytopathological Union (MPU)
15 November – 18 November, 2027
Cairo, Egypt
Website: epseg.org/18th-congress-of-the-mediterranean-phytopathological-union-mpu

13th International Congress of Plant Pathology 2028
19 August – 25 August, 2028
Gold Coast, Queensland, Australia
Website: www.icpp2028.org



INTERNATIONAL SOCIETY FOR PLANT PATHOLOGY (ISPP)

WWW.ISPPWEB.ORG

The ISPP List is an e-mail list server which broadcasts messages and announcements to its subscribers. Its goal is to facilitate communication among members of the International Society for Plant Pathology and its Associated Societies. Advertised vacancies in plant pathology and ISPP Newsletter alerts are also sent to members of the ISPP List.

In accordance with the guidelines and recommendations established by the new EU General Data Protection Regulation 679/2016 (GDPR), the International Society for Plant Pathology has created a Privacy Information Notice containing all the information you need to know about how we collect, use and protect your personal data.

This policy explains when and why we collect personal information about our users, how we use it, the conditions under which we may disclose it to third parties, how we keep it safe and secure and your rights and choices in relation to your personal information.

Should you need further information please contact business.manager@issppweb.org

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