



MEMORANDUM

Agenda Item 15(C)1

TO: Honorable Chairman Oliver G. Gilbert, III
and Members, Board of County Commissioners

DATE: October 16, 2024

FROM: Honorable Juan Fernandez-Barquin
Clerk of the Court and Comptroller

SUBJECT: Appointment of Jason L. Downing,
Ph.D. to the Environmental Quality
Control Board (EQCB)

Basia Pruna, Director
Clerk of the Board Division

It is recommended that the Board consider the appointment of Jason L. Downing, Ph.D. to serve as a member of the Environmental Quality Control Board (EQCB). The EQCB is a quasi-judicial board created by Sec. 24-8 of the Code of Miami-Dade County. Mr. Downing meets the qualifications to serve on the EQCB. He has a Ph.D. in biology with extensive experience in conservation and molecular biology and tropical urban ecology.

Mayor Levine Cava's memorandum of appointment and Mr. Downing's resume are attached for your review. Mr. Downing's appointment will fill a vacancy created by Ordinance No. 21-125, which increased the number of members on the EQCB from five (5) to seven (7).


BP/yc
Attachment

Memorandum



Date: September 25, 2024

To: Juan Fernandez-Barquin
Clerk of the Board

From: Daniella Levine Cava
Mayor 

Subject: Appointment of Jason L. Downing, Ph.D. to the Environmental Quality Control Board by the Board of County Commissioners

Please find the resume of Jason L. Downing, Ph.D. for consideration by the Board of County Commissioners (Board) for appointment to the Miami-Dade County Environmental Quality Control Board (EQCB) attached. Members of the EQCB are appointed by the Board pursuant to Section 24-8 of the Code of Miami-Dade County (Code).

The EQCB is a quasi-judicial board created by Ordinance No. 69-30 that convenes monthly to hear cases for variances from, or time extensions to comply with, the requirements of the Environmental Protection Ordinance (Chapter 24 of the Code of Miami-Dade County) and appeals from decisions of the Director of the Division of Environmental Resources Management in the Department of Regulatory and Economic Resources. The membership, terms of office, organization, duties and powers, and procedures which govern the EQCB are set forth in Chapter 24 of the Code.

The membership of the EQCB was recently amended by Ordinance No. 21-125, increasing the number of members from five to seven. Dr. Downing's appointment will fill a vacancy created by this ordinance.

The EQCB is composed of seven members appointed by the Board. Members serve staggered three-year terms. Quorum requires a majority of members duly appointed to the EQCB, and four votes are required for certain types of cases within specific wellfield protection areas. Due to the highly scientific and technical nature of the matters that the EQCB reviews, the members of the EQCB are required to have advanced scientific or engineering qualifications as follows:

- a) Two members shall be scientists possessing a master's or Ph.D. degree in biology or marine biology.
- b) One member shall be a scientist possessing a master's or Ph.D. degree in biochemistry or chemistry.
- c) Three members shall be professional engineers, licensed in the State of Florida, or alternatively, in lieu of two licensed professional engineers, two members may be either (i) an engineer with a Ph.D. degree in agricultural, biological, biomedical, chemical, civil or coastal, electrical, environmental, industrial, mechanical, oceanographical, marine, or nuclear engineering; or (ii) a professional geologist, licensed in the State of Florida, or a geologist with a Ph.D. degree in hydrogeology, groundwater hydrology, geology, marine and coastal geology, or geophysics.
- d) One member shall be a scientist possessing a master's or Ph.D. degree in biology, marine biology, biochemistry, chemistry, botany, environmental studies, or any related environmental field of study.

Of the six current members, the EQCB has one member with a Ph.D. in biology, one member with a Ph.D. in biochemistry, one member with a Ph.D. in biomedical engineering, two members are Professional Engineers with a valid license issued by the Professional Board of Engineers in the State of Florida, and one member has a Ph.D. in civil engineering.

Dr. Downing has a Ph.D. in biology with extensive experience in conservation biology, tropical urban ecology, and molecular biology, and he meets the qualifications to serve on the EQCB and is recommended for appointment. Due to the high volume of cases heard by the EQCB, the appointment of Dr. Downing is necessary to avoid possible delays.

Attachment

Resume – Jason L. Downing, Ph.D.



Jason L. Downing

Research Biologist

Experienced research biologist working to expand the frontiers of biological science through conservation, education, and research. Specific areas of focus include plant genetics, ecology, horticulture, and microbiology. Work in diverse settings like universities, government agencies, and research institutions. Maintain consistent record of publishing research findings in academic journals, presenting at conferences, and collaborating with other scientists. Involved in grant writing and securing funding for research, mentoring and training junior researchers and students, and staying up to date with the latest advancements in the field.

Contact

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821 Meridian Avenue Apt
10 Miami Beach, Florida
33139

Education

2016
Ph.D. Biology
Florida International University

2011
M.Sc. Environmental Studies
Florida International University

2002
B.S. Organismal Biology
University of Kansas

Expertise

- Conservation Biology
- Tropical Urban Ecology
- Molecular Biology
- Education and Outreach
- Plant Breeding and Tissue Culture

Appointments

American Orchid Society Conservation Board

Miami Dade College Science Board

Trustee Miami Botanic Garden

Experience

2016-present

Fairchild Tropical Botanic Garden | 10901 Cutler Road, Coral Gables, FL

Director of Research

As Director of Research, I am responsible for overseeing and leading the research department, ensuring the development and implementation of research and conservation. This role involves managing a team of researchers, setting research priorities, and ensuring the quality and integrity of research outputs. Collaborate with cross-functional teams, stakeholders, and external partners to drive research initiatives and secure funding. Key responsibilities include data analysis, publication of findings, and maintaining compliance with ethical standards.

I am also responsible for curating and managing the orchid collections, overseeing daily laboratory and nursery orchid production, maintaining the orchid seed and mycorrhiza repository, and DNA Bank. Since 2016 I have managed The Million Orchid Project™, a citizen science program engaging local students and the public in propagating native orchids.

2009-present

Miami Dade College & Florida International University | Miami, FL

Adjunct Faculty

As an Adjunct Faculty member at Florida International University and Miami Dade College since 2016, I have been actively engaged in teaching lecture courses in a range of biology fields, including biology, microbiology, conservation biology, and botany. Additionally, I have contributed as an external participant in faculty selection committees and have fostered collaborative efforts with fellow faculty members, supporting student research initiatives and grant proposals.

2009-2010

Montgomery Botanic Center | Miami, FL

Research Fellow

During my tenure as a Research Fellow at the Montgomery Botanical Center in Coral Gables, FL, from 2009 to 2010, my responsibilities included the application of the Weed Risk Assessment tool to evaluate plants introduced for horticultural and conservation purposes. Moreover, I played a crucial role in integrating this assessment technique into the curriculum of a biology course at the University of Miami, specifically PCB 4673, Evolutionary Ecology.

References

Dr. Hong Liu

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Dr. Carl Lewis

Director, Fairchild Tropical Botanic Garden

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