



College of Agriculture

OFFICE OF THE DEAN

*Karen Plaut*

*Glenn W. Sample Dean of Agriculture*

To: Jay Akridge, Provost

From: Karen Plaut, Glenn W. Sample Dean of Agriculture 

Date: July 24, 2022

Re: Distinguished Professor Nomination

It is my pleasure to submit the nomination of Andrew Mesecar for Distinguished Professor of Biochemistry. There was unanimous support from the primary committee in the Department of Biochemistry. It was endorsed by a committee of Distinguished Professors with a vote of 4-1. The committee was led by Dr. Tim Ratliff in the College of Veterinary Medicine and included Natalia Dudareva and Bruce Hamaker in the College of Agriculture, Arun Ghosh and Stanton Gelvin in the College of Science.

Four Distinguished Professors from 3 different colleges strongly supported the nomination of Dr. Mesecar as a Distinguished Professor based on the outstanding research and publication record, continuous federal funding, national and international contributions, and strong support from external reviewers. The one No vote cited limited national and international recognition, first authorship on papers, and qualifications of letter writers as the basis of their No vote.

Dr. Mesecar's scientific impact is not in question. He has an h-index of 66, and 151 publications with over 14,036 citations and growing. He has graduated 37 PhD, 2 MD/PhD and 15 post-doctoral students throughout his career. From 2019, he was lead author on 11 papers. He consistently shares the spotlight with his students who are also authors on many of the publications. Thus, Dr. Mesecar not only leads the scientific enterprise but also shares the spotlight with others. He earned the outstanding graduate mentor award at Purdue University in 2021. Dr. Mesecar has also shown his leadership with 3 awarded patents and 6 provisional (under review by the US patent office) patents.

Dr. Mesecar's work on coronavirus structure was instrumental to drug development during the current pandemic and the previous SARS epidemic. His work is frequently cited by both academic and industry partners and his seminal work has provided the basic framework for many anti-viral treatments for COVID-19. Dr. Mesecar's national prominence is clear as he was asked to be on a panel discussing anti-virals for SARS-CoV2 by Francis Collins (Director of the National Institutes of Health) and Anthony Fauci (Director of the National Institute of Allergy and Infectious Diseases and Presidential Advisor). In addition, Dr. Mesecar has served in a leadership role as the Deputy Director of the Purdue Center for Cancer Research and led efforts at Oakridge Labs to develop and fund a \$12M neutron diffractometer. He has also served on multiple NIH panels including as a reviewer for multiple cancer centers. His international reputation is clear from the fact that he has given international presentations in 5 different countries at leading institutions. It is true that Dr. Mesecar has not received an award from a society; however, Dr. Mesecar is part of an extremely large community of scientists – there are 155,000 scientists in the American Chemical Society (ACS) – and his work crosses multiple

disciplines which often makes these types of awards elusive. Many societies do not reward Fellows until individuals are at a later stage of their career, and ACS only implemented a Fellows program 15 years ago with less than 1 percent of ACS members currently recognized as Fellows.

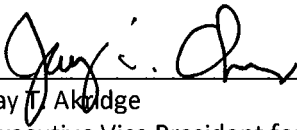
Last, the single No vote felt there was a limited number of distinguished scientists that wrote letters in support of the package. The panel of Distinguished Professors is free to solicit as many additional letters from prominent scientists as they would like. However, 4 of the 5 panel members felt that the letters from a National Academy member, Distinguished Professors, Institute Directors and Deans – all of whom are high-profile researchers at highly-regarded universities (University of Michigan, University of Wisconsin-Madison, Oregon State University and University of Texas San Antonio) and cancer research centers (Cleveland Clinic and Fred Hutchinson Cancer Research Center) – were sufficient to evaluate Dr. Mesecar's contributions and strongly supported the nomination of Dr. Mesecar for Distinguished Professor. Thus, the panel as a whole felt that no additional letters were necessary. The packet of entire letters can be found in the nomination packet. Here are some individual quotes from the letters:

- Distinguished Professor Janet Smith (University of Michigan and member of the National Academy of Sciences) commented about Dr. Mesecar's work in drug discovery, *"Andy has amassed an arsenal of biochemical and biophysical techniques and tools for drug discovery and is a major contributor to the academic drug discovery enterprise in the US..."*
- Professor Steven Swanson (Dean of the University of Wisconsin-Madison School of Pharmacy) said of Dr. Mesecar's impressive funding record, *"He has an established track record of successfully competing for NIH and other federal funding for over two decades. His current funding is also substantial at over two million dollars per year. Andy has a strong record of translating major funding into publications that have significant impact on his field."*
- Professor Richard van Breeman (Endowed Chair and Director of the Linus Pauling Institute, Oregon State University) states that *"as his collaborator, I can say from experience that Andy is enthusiastic, creative, scholarly, and productive."*

In summary, Dr. Mesecar brings to Purdue an established record of scholarship with 151 publications, 99 invited talks and an h-index that puts him in the top echelon of scientists at Purdue. He has had a continuous record of funding from the NIH since he began his career. His students have been successful as scientists, physicians and lawyers across the country. The timeliness of his research is clear. Dr. Mesecar has been a national and international leader in providing the basic knowledge necessary to develop anti-virals for SARS-CoV-2 (COVID -19) and has developed novel anti-viral molecules with industry partners to combat the virus. At the same time, he had continued as Associate Director of the Purdue Center for Cancer Research and Head of the Department of Biochemistry. I strongly encourage you to endorse the unanimous decision by the primary committee in Biochemistry, 4 out of 5 of the Distinguished Professors from 3 different colleges who strongly support Dr. Mesecar's nomination for Distinguished Professor, as well as my enthusiastic support for his scholarly productivity and his leadership ability. Dr. Mesecar is a great scientist and a role model for students and faculty at Purdue.

Thank you for your consideration of our nomination.

**Approved:**

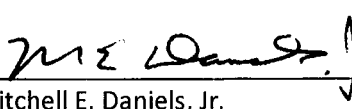
  
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Jay Akridge

Executive Vice President for  
Academic Affairs & Diversity

8/8/2022  
Date

cc: Matt Clawson

**Approved:**

  
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Mitchell E. Daniels, Jr.  
President

9/2/22  
Date