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October 21, 2013

UNIVERSITY OF ILLINOIS
URBANA-CHAMPAIGN SENATE

Committee on Honorary Degrees
(Final; Action)

HD.14.02 Nominations for Honorary Degrees

The Senate Committee on Honorary Degrees is pleased to nominate the following individuals for an honorary degree to be conferred at the May 2014 Commencement exercises:

- George E. Andrews
- Narayana N.R. Murthy

Information relative to the background and achievements of these nominees is attached. Based on the criteria approved by the Senate, the Committee has selected these individuals for Senate consideration.

The Committee wishes to express its sincere appreciation to all who participated in the process, particularly those who spent considerable amounts of time and effort in preparing documentation for these nominees.

COMMITTEE ON HONORARY DEGREES

Jeremy Tyson, Chair
Mckennon Biers
Stephen Cartwright
Harrison Kim
Connor Schickel
Jinming Zhang
Steven Zimmerman

George Andrews
Evan Pugh Professor of Mathematics
The Pennsylvania State University

EDUCATION:

B.S. and M.A., Oregon State University, 1960
Ph.D., University of Pennsylvania, 1964

Nominated by Bruce Berndt, CAS Professor of Mathematics, University of Illinois at Urbana-Champaign.

BASIS FOR NOMINATION:

George Andrews is an internationally recognized number theorist and the preeminent authority on the mathematical theories of partitions and q-series as well as their application to statistical physics. Over the course of his career, he has dramatically advanced the visibility of his subject by elucidating and clarifying the pioneering work of the remarkable Indian mathematician Srinivasa Ramanujan. Through expository writing, public lectures, and as a consultant for a PBS documentary on Ramanujan, he has helped to put a human face on an often esoteric subject. His passion for mathematics transcends his area of research, encompassing mathematics education at all levels as well as service to his university and to national and international scientific organizations and advisory boards.

EXCERPTS FROM THE NOMINATION LETTER:

“Andrews is one of the world’s foremost number theorists, as witnessed by the fact that at the age of 73, the *Selected Works of George E. Andrews*, totaling approximately 1100 pages, has already been published. The theory of partitions began over two and a half centuries ago with the work of the great Swiss mathematician Leonhard Euler. At the beginning of the 20th century, discoveries by India’s greatest mathematician, Srinivasa Ramanujan, revolutionized the subject. The theory of q-series is intimately woven with the theory of partitions. The first theorems in the subject were found by Euler, Gauss, and Cauchy. Ramanujan is universally recognized as the leading figure in the history of the subject, while Andrews is unquestionably today’s premier researcher and the world’s leading authority on the subject in the history of mathematics.”

“It has often been asserted that Andrews’ 1976 discovery of Ramanujan’s ‘Lost Notebook’ in the Trinity College library would be comparable, in the music world, to finding the tenth symphony of Beethoven. In the past two decades, the lost notebook has had an enormous influence on the theory of partitions.”

“Andrews has been a tireless servant to mathematical endeavors at all levels with a longstanding interest in elementary and high school education. In his retiring Presidential address at the annual meeting of the American Mathematical Society in January 2012, Andrews devoted the last half of his lecture to K-12 mathematics education.”

“Because of his distinguished research career, his tireless commitment to mathematics at all levels, and his intimate connections with the University of Illinois, it would be an honor for the University of Illinois to bestow upon George Andrews an honorary doctoral degree.”

AWARDS:

1980 Hedrick Lecturer, Mathematical Association of America
1982 Guggenheim Fellow
1997 Member, American Association for the Advancement of Science
1998 Honorary Degree in Physics, University of Parma, Italy
2003 Member, National Academy of Sciences
2007 Polya Lecturer, Mathematical Association of American
2008 Honorary Professorship, Nankai University, China
2009 Fellow, Society for Industrial and Applied Mathematics
2012 Fellow, American Mathematical Society

EXCERPTS FROM THE LETTERS OF RECOMMENDATION:

Freeman Dyson, Professor Emeritus of Physics, Institute for Advanced Study, Princeton, NJ

“Professor Andrews has been a world leader in the field of analytic number theory for the last forty years. He has built up at Pennsylvania State University a mathematics department of outstanding quality. Whenever I visit him there, I find him at the center of a buzz of creative activity. He is a star in the world of mathematics. I recommend him whole-heartedly as a candidate for an honorary degree. By honoring him, you will also bring honor to your own university.”

Richard Askey, Professor Emeritus of Mathematics, University of Wisconsin at Madison

“I do not know how to describe the work Andrews has done with Ramanujan’s Lost Notebook other than to say that I am in awe of it, and think it has been done about 100 years earlier than I thought it would be. When Andrews started to do mathematics his area was seen as marginal, but no longer. This change is primarily due to his work. He has also served a term as President of the American Mathematical Society, a position which should only go to those who have a broad and deep view of how mathematics develops and interacts with other fields. He qualifies on all of these counts.”

“In a talk at the meeting in Urbana to celebrate the 100th anniversary of Ramanujan’s birth, Freeman Dyson referred to George Andrews as the chief gardener in Ramanujan’s garden. That is a better description than I can come up with, but it falls short of what George Andrews has done.”

Peter Paule, Professor of Mathematics, Director of RISC (Research Institute for Symbolic Computation), Johannes Kepler University, Linz, Austria

“Professor Andrews enjoys the highest international reputation; he is an exemplary leader among his peers. Andrews’ book *The Theory of Partitions* (1st edition, 1976) is still **the** reference book in the field. His AMS presidency was an outstanding activity appreciated worldwide. He is one of the very few eminent research mathematicians who cares about the mathematical education and training of our young people. Andrews also played a decisive role in the development of the (freely available) OMEGA computer algebra package. Andrews was using computer algebra at a very early stage of its development (he was an official tester for IBM’s SCRATCHPAD system). But in the course of the OMEGA project I also learned about Andrews’ remarkable feeling for algorithmic aspects. George Andrews is an outstandingly productive mathematician with stunning creativity. His scientific achievements and also his various services for the scientific community resulted in the highest level of worldwide recognition as a scholar.”

Narayana N. R. Murthy
Executive Chairman
Infosys Ltd.

EDUCATION:

Bachelor of Engineering, National Institute of Engineering, Mysore, India 1967
Masters of Technology, Indian Institute of Technology, Kanpur, India 1969

Nominated by Narendra Ahuja, Professor Emeritus, Donald Biggar Willet Professor of Engineering, University of Illinois at Urbana-Champaign and Janak H. Patel, Professor Emeritus, Donald Biggar Willet Professor of Engineering, University of Illinois at Urbana-Champaign.

BASIS FOR NOMINATION:

Narayana N. R. Murthy is one of the world's most visionary entrepreneurs and distinguished business leaders. As founder of Infosys Limited, one of the largest and leading IT companies in India, his leadership has transformed the country's economy, putting India on the world stage. Murthy is a humanitarian who believes that the real power of success is in generosity. He has established the Infosys Science Foundation to recognize scientific research and the Infosys Foundation to address the basic needs of the poorest of the poor.

EXCERPTS FROM THE NOMINATION LETTER:

"In 1981, Murthy founded Infosys Limited along with six younger colleagues in Bangalore, India. The founders had to borrow the initial seed capital of about \$250 from their wives, as no bank was willing to fund them. Under Mr. Murthy's leadership, Infosys emerged as a leading provider of IT services globally, and has grown into an organization with revenues of \$6.35 billion, over 600 clients, 133,000 employees, operating in 76 cities in 33 countries, and a market capital of \$37.2 billion."

"Murthy created the country's largest (and one of the world's largest) stock option plans for the employees of Infosys by giving away as much as 35% of the total equity. The Infosys Foundation has created libraries for poor children in 15,000 villages in India; provided scholarships to thousands of poor children; built hospitals; supported cultural activities, and supported Akshaya Patra, the largest free-lunch program in the world."

"Murthy not only created one of the largest companies in India, he transformed the country's economy and put it on the world stage, and has become a source of inspiration for entrepreneurs across India and the world."

AWARDS:

1999 Fellow, Indian National Academy of Engineering
2003 Ernst and Young World Entrepreneur of the Year
2007 Ernst Weber Medal, IEEE
2007 Commander of the Order of the British Empire
2008 Legion d'honneur, Government of France
2010 Foreign member, US National Academy of Engineering
2011 NDTV Indian of the Year
2012 Listed among the ``12 greatest entrepreneurs of our time'', *Fortune*

EXCERPTS FROM THE LETTERS OF RECOMMENDATION:

Bill Gates, Chairman, Microsoft Corporation, Redmond, WA

“As an engineer, a business leader, and a philanthropist, Narayana Murthy truly stands apart for his remarkable accomplishments, his intellectual vigor, his ethics and business values, and his deep commitment to India and the poor. Through his visionary work in founding Infosys and running the company for 21 years, he not only created an industry, but fundamentally transformed India. In the process, he not only enriched tens of thousands of his countrymen, but lifted the image of his country throughout the world, and – most importantly – transformed the hopes and aspirations of generations of young Indians. The impact on his country, in my view, cannot be over-stated. Thanks to Narayana’s vision and determination, Infosys has become a leading provider of IT services globally, with 133,000 employees in 33 countries. His public service in India and throughout the world is a model for any business leader. As a philanthropist and public citizen, he has once again profoundly influenced India. The Murthy family has been vital supporters of India’s free lunch program, Akshaya Patra, feeding 1.3 million children daily. Giving this honorary doctorate to so eminent a leader as Narayana Murthy will bring much deserved recognition to Narayana for his work.”

John L. Hennessy, President, Stanford University

“Mr. Murthy is a distinguished leader and one of India’s most successful and well-respected entrepreneurs. His company, Infosys, is the 11th largest company in the software and services sector worldwide. And the story of the company being built from scratch and with minimal resources, in a country without the financial and human resources available to a U.S. entrepreneur, is both unique and inspiring. In addition to his business leadership, Mr. Murthy is an admirable humanitarian with a strong commitment to humanitarian causes.”

W. Kent Fuchs, Provost, Cornell University

“As founder and CEO of Infosys, Mr. Murthy combined his knowledge of engineering and computer science with a keen understanding of business to build the company from the most humble beginnings to its current status as a global leader in IT consulting and software development and services. During his association with Cornell as a trustee and presidential councilor, Mr. Murthy has inspired many on our campus through his advocacy for the same values of fairness, transparency, accountability and social responsibility that he built into the corporate culture of Infosys. Mr. Murthy is widely and justly admired in the business, engineering and philanthropic communities. To grant him an honorary degree would be a credit to the University of Illinois and an appropriate recognition of the accomplishments, integrity and generosity of this remarkable individual.”