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Farnesyl Diphosphate Synthase. Altering the Catalytic Site To Select for Geranyl Diphosphate Activity
Suzanne M. Stanley-Fernandez, Brenda A. Kellogg, and C. Dale Foulter
(Article), 2008, 39 (50), 15316-15321
DOI: 10.1021/bi8001430s

Free-Energy Landscape of Enzyme Catalysis
Stephen J. Benkovic, Gordon G. Hammes, and Sharon Hammes-Schiffer
(New Concepts), 2008, 47 (11), 3317-3321
DOI: 10.1021/bi800049e

The Glycosylphosphatidylinositol Anchor: A Complex Membrane-Anchoring Structure for Proteins
Margot G. Paulick, and Carolyn R. Bertozzi
(Current Topics/Perspectives), 2008, 47 (27), 6991-7000
DOI: 10.1021/bi800632a

AFM: A Nanotool in Membrane Biology
Daniel J. Müller
(Current Topics/Perspectives), 2008, 47 (31), 7986-7998
DOI: 10.1021/bi800753x

DNA Polymerases as Therapeutic Targets
Anthony J. Berdis
(Current Topics/Perspectives), 2008, 47 (32), 8253-8260
DOI: 10.1021/bi801179f

Phospholamban Thiols Play a Central Role in Activation of the Cardiac Muscle Sarcoplasmic Reticulum Calcium Pump by Nitroxy
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(Rapid Report), 2008, 47 (50), 13150-13152
DOI: 10.1021/bi801925p

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(Current Topics/Perspectives), 2008, 47 (6), 1465-1473
DOI: 10.1021/bi702209s

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(Current Topics/Perspectives), 2008, 47 (20), 5481-5492
DOI: 10.1021/bi800202z

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DOI: 10.1021/bi702333z

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One Hundred Years of the Division of Agricultural and Food Chemistry

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INTRODUCTION

The Division of Agricultural and Food Chemistry (AGFD) of the American Chemical Society (ACS) celebrated its 100th anniversary in 2008. Several histories of AGFD from different perspectives have appeared over the years, the latest being a 2002 article by Harold Pattee on the occasion of the 50th anniversary of the *Journal of Agricultural and Food Chemistry* (1). That paper focused on the activities of AGFD in the postwar era; the present paper will deal more with the formation and early years of the division.

SECTION FOUNDED

The American Chemical Society (ACS) was founded in 1876 and met in the summer and in December each year starting with Newport, RI, and Philadelphia, PA, meetings in 1890 (2). During the next three decades, ACS often met in conjunction with Section C (chemistry) of the American Association for the Advancement of Science (3). Originally, all of the papers were presented in general sessions, but this arrangement became impractical as ACS grew. As stated in the November 18, 1904, issue of *Science*: "Owing to the large number of papers annually presented ... and the utter impossibility of reading them all ... a radical change has been adopted" (4). Beginning with the December 1904 meeting in Philadelphia, papers were categorized into sections, each chaired by an expert in the field. Following welcoming speeches and an address by the president of ACS, members attended presentations in their areas of interest. The initial sections were Industrial Chemistry, Inorganic Chemistry, Organic Chemistry, Physical Chemistry, and Agricultural, Sanitary and Physiological Chemistry (5). The latter was chaired by William Pitt Mason, the founder and first head of the chemistry and chemical engineering departments at Rensselaer Polytechnic Institute. Mason was a chemist, engineer, and medical expert who was a pioneer for pure municipal water supplies (6). Nine papers were presented in the section, six of them dealing with water (5).

The section experienced name changes over the next few years, with "physiological" being dropped in December 1905 and "biological" being added in the summer of 1907 (7). The section was headed in 1905 by two former ACS presidents, John H. Long of Northwestern University, who had served as president in 1903, and Harvey Washington Wiley, the chief of the USDA's Bureau of Chemistry (predecessor of the FDA) and ACS president in 1893.

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The next three chairs were Edward B. Voorhees (Director, New Jersey Agricultural Experiment Station), Lucius Lincoln van Slyke (Chief Agricultural Chemist, New York Agricultural Experiment Station), and Frank T. Shutt (Canadian Department of Agriculture). "Food" appeared in the section name for the first time in December 1907 when the Section of Agricultural, Sanitary, and Food Chemistry was led by Willard D. Bigelow (Assistant Chief, USDA Bureau of Chemistry) (7). The name was at last shortened in 1908 to the Section of Agricultural and Food Chemistry and was chaired at the summer meeting by Andrew Lincoln Winton (Chief, Chicago Food and Drug Laboratory, USDA Bureau of Chemistry) and in December by Homer Jay Wheeler (Director, Rhode Island Experiment Station) (7).

The first divisions in ACS were formed in 1908 after successful section meetings proved a need for them (2). Homer Wheeler, representing a committee of 10, presented ACS Council with a request for the formation of the Division of Agricultural and Food Chemistry at the Baltimore meeting on December 30, 1908. The request was promptly granted, and AGFD was born (2, 7).

AGFD BEGINS

Figure 1 shows the first AGFD program, which took place at the summer 1909 meeting in Detroit, MI. Willard D. Bigelow, the December 1907 section chair, served as the first AGFD chair, and William B. D. Penniman was the first secretary. Penniman had founded a laboratory testing and civil engineering firm, Penniman & Browne, Inc., in Baltimore, MD, in 1896, and the firm is still in business. The first paper, "The distillation of whiskey," was presented by Arthur B. Adams, the Chief Chemist of the Internal Revenue Service through the early Prohibition days, when that agency dealt with identifying illegal alcoholic products (9). The next two papers were given by former section chair L. L. Van Slyke, a noted dairy chemist whose formula for cheese yield is still in use (10). The fourth paper was presented by Elmer Verner McCollum, who was to become one of the most celebrated members of the division. McCollum established the first rat colony for nutritional research in the United States, was the codiscoverer of vitamin A at the University of Wisconsin in 1912, and was the codiscoverer of vitamin D at Johns Hopkins University in 1922. He also devised the letter names for vitamins (11). The next two papers were delivered by John Pearce Mitchell, who was at Stanford University as a student, chemistry instructor, and registrar from 1899 to 1973. He also served two terms as Palo Alto mayor in the early 1950s and has a prominent public park named for him (12). He was followed in the program