CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (September 11, 2013)

President John Vincenti called the meeting to order at 6:40 p.m. He announced that he was giving each member in attendance an already stamped brochure describing the club's meetings for the 2013-14 program year. He expects that each member will mail his copy to a potential member with an invitation to attend one of our forthcoming meetings. Louise Goldschmidt was the only guest at this meeting, but it is hoped that many guests will come to future meetings and will decide to become members. He promised a free dinner to the member who brings in the largest number of new members during this program year. Treasurer Lee Stout reminded members to pay their IATC and Club dues if they had not already paid. Art and Louise Goldschmidt reported on their experiences at the 2013 Convention of the International Association of Torch Clubs: visit to battle sites and to homes in Columbia, stately or otherwise, and the Columbia Zoo. Art urged members to consider attending the 2014 Convention in St. Catharine's, Ont.

Art delivered a short paper on "Dusé Mohamed Ali: A Pioneer African Nationalist," which he said was a continuation of a series of talks he has given on men who lived on the fringe between two contrasting cultures. Born in Alexandria to an Egyptian father and a Sudanese mother, Ali grew up in England and spent most of his life in Europe and the US, working as an actor and a journalist, but his great passion was for achieving the liberation of Africans and other Blacks from colonialism, publishing *In the Land of the Pharaohs* in 1911 and editing *The African Times and Orient Review*, the first English-language periodical put out by a person of color, between 1912 and 1920. He later lived in the US, where he backed Marcus Garvey's Universal Negro Improvement Association, known for its Back to Africa campaign. Ali went to Nigeria in 1931, founded a nationalist newspaper called *The Comet*, chaired the first convention of the National Council of Nigeria and the Cameroons, and died in 1945.

Art followed his Torch Talk with an impromptu speech on the background to the Syrian crisis, noting the country's lack of any tradition of nationhood and its strong religious sectarianism. The outbreak of its revolution in February 2011 was inspired by the successful "Arab Spring" revolutions in Tunisia and Egypt and fueled by the resentment of Syria's Sunni Muslims, 70 percent of its population, against the 10 percent minority of Alawites who have ruled since 1966. He explained how the Alawites rose to power through their preponderance in Syria's armed forces, dating back to the French mandate (1922-1945). Initially led by young liberals, the rebels expected to overthrow President Bashar al-Assad's regime quickly. Instead, the regime and the military, armed by Russia and Iran, remained in power, and Islamist groups like al-Qa'ida and al-Nusra infiltrated the rebel ranks. The Obama administration has increasingly supported the rebels. When the Syrian Army reportedly killed some 1,400 Syrians, mainly civilians, with chemical weapons, Obama threatened to send Cruise missiles against strategic sites in Syria as a warning to the regime not to use poison gas. He referred the issue to the US Congress but did not promise to abide by its recommendations. Two days ago Russia's government, following an offhand remark by Secretary of State Kerry in a press conference, proposed that the international community supervise the removal of all chemical weapons from Syria. This idea was endorsed by the UN Secretary General and the Obama administration. Kerry and Russian Foreign Secretary Lavrov are about to meet in Geneva to discuss how to carry out the removal. Most of the members took part in this historical and political discussion.

The meeting adjourned at 7:45 p.m. Attendance: 14 members and one guest.

Next talk: Lee Stout, "Preserving our Historic Treasures: How & Why," 9 October 2013, 6 p.m.

Respectfully submitted, Art Goldschmidt, Secretary

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (October 9, 2013)

President Vincenti called the meeting to order at 6:40 p.m. Treasurer Stout stated that the Club is in good financial shape. Anticipating his absence next month for a medical appointment, Vincenti announced that President-Elect Smith will preside. He has photographed everyone who attended tonight's meeting, but if a member doesn't like his picture, he may email one or wait until December, when he and any member who missed tonight's meeting may be photographed. Each person should also email a short bio. Mark Meckstroth introduced two guests who may seek membership: Jim and Vanitha Dayananda. Lee Stout introduced his wife, Dee, and a friend, Ginny Grims, as well as Louise Goldschmidt.

Lee Stout, former Penn State Archivist, spoke on "Preserving our Historic Treasures: How and Why?" Tomorrow is National Electronic Records Day. He clarified the relationship between "preservation," "conservation," and "restoration," all of which involve making an existing object available for the future. Challenges to preservation include the internal chemistry of the item, the environment in which it is kept, and the people who handle it. Film presents special challenges, as the earliest film was nitrate-based and highly flammable, but magnetic tape used for sound recording is also impermanent. Microfilming records has largely been superseded by digitizing them. We choose to preserve diverse items: paper, pictures, film, and photos. Each must be preserved in different environments. Many items have low intrinsic value. The National Archives and Records Administration estimates that only 0.4 percent of all records need to be preserved in their original form; 99.6% could be reformatted without losing information. Even so, digital data, however ubiquitous, may become irretrievable as computer hardware and software change.

In electronic world, three desiderata are reliability, integrity, and authenticity. But, as computers change, media grow obsolete; tapes, disks, CDs, and thumb drives are unstable; file formats vary immensely; and the sheer volume of the digital record is huge (6 terabytes for the Clinton administration's email records; 500 terabytes for image files of the 2000 census returns). Someone must decide what to keep; what (and when) to toss out records; how to organize, preserve, and store the materials; and how to maintain access and enable use. This applies also to individuals and families. Everyone must identify what he wants to save and where it is located, decide what matters, organize "archival" material in one place, and keep at least three backup copies in different places and media. It would be wise to review all this at least every five years to fit new technology. Some should be printed out. Everyone should plan for contingencies, such as floods, fire, etc., and record vital matters, and make sure someone knows the relevant passwords. New legal issues: who has access to Facebook pages or emails pertaining to a dead person? Six states have passed laws pertaining to digital assets. A testator should add a codicil to his will empowering an executor to act in the event of his death.

Lively discussion ensued. Questions included natural disasters affecting university libraries and archives, securing one's records from unwarranted access, restoration of the [Henry Varnum] Poor frescoes in Old Main, whether a computer's hard drive can survive a fire, does the legal system preserve confidentiality in records, changing work conditions in libraries and archives as new equipment becomes available, how to preserve old color slides, the superiority of paper over digital records and magnetic tape, the changing quality of paper over the centuries, and whether a CD or DVD can be used to back up paper records.

The meeting adjourned at 7:50 p.m. Next month Tom Berner will speak on "Pennsylvania Barn Stories."

Respectfully submitted, Art Goldschmidt, Secretary

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (13 November 2013)

Vice President Stephen Smith, serving in the absence of President John Vincenti, called the meeting to order at 6:50 p.m. Art Goldschmidt, acting for Gordon DeJong, introduced Marylee Taylor, a recently retired professor of sociology, as a candidate for membership in the Club. The vote to accept her was unanimous. He also introduced his wife, Louise, and friend, Bob Ritzmann, who is a retired engineer. Tom Berner introduced his wife, Paulette. Art reminded the members of the June 2014 IATC Convention in St. Catharine's, Ontario, and urged them to invite prospective members to future meetings. Steve introduced the speaker, Tom Berner, who spoke on "Pennsylvania Barn Stories: A Work in Progress."

Tom is in the process of writing an illustrated book about old barns in Pennsylvania. His interest grew out of having observed of picturesque barns during road trips he and his wife made between New Mexico and Pennsylvania, especially on I-81 and I-80. He has visited and photographed many barns and plans to write about the history and current condition of 32 barns in 21 counties. Some of them were originally built in the 18th century, many by German settlers. Indeed, there is a type called the "Pennsylvania Barn" that can be found in other states, such as Virginia, Ohio, and Indiana, having a basement devoted to the housing of farm animals, with hay stored on an upper level. Some continue to serve working farms; others have been converted to other uses, including a girls' camp, an antique outlet, a Roman Catholic academy, playhouses, restaurants and banquet halls for weddings or parties, and residences. Some of the barns bear huge signs for Mail Pouch Tobacco; one has a restored sign for Red Man Tobacco, although the company no longer advertises on barns. Among the farming uses of the barns are dairying, fruit farming, and (before the great blight) storing varieties of chestnuts. He showed a Berks County barn that belonged to the parents of the author John Updike, who wrote a short story called "Pigeon Feathers" that was drawn from an experience of his own childhood. Tom credited his wife Paulette for aiding in the process of documenting and photographing these barns and answered many questions from the audience. The relative paucity of examples from northern Pennsylvania was partly due to the different origin of its settlers, who came mainly from New England, and fewer have been documented by the Historic Barn and Farm Foundation of Pennsylvania. He does not know when his work will be published; he is currently applying for grants.

The meeting adjourned at 7:55 p.m. The next meeting, on 11 December 2013, will feature Dean Snow speaking on "The American Revolution: Battles at Saratoga."

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (December 11, 2013)

President John Vincenti called the meeting to order at 6:50 p.m. and announced that Region 2 Director Meredith Rousseau was attending. Dean Snow introduced Michael Hecht and Steve Smith presented Gary Herbert; both are considering membership in our club. John still needs to take pictures and get brief bios of some of our members. Art announced that we may suggest to Hoag's Catering what we want to have for dinner in the future and asked if anyone wishes to attend the June 2014 Convention of the International Association of Torch Clubs. John has already signed up to go. Art then introduced Meredith Rousseau, who is a member (and secretary) of the Lancaster Torch Club. She spoke briefly on how Torch Clubs are related to the IATC, the admission of women to membership, and the condition of other clubs. The IATC Board, of which she is a member, seeks more input about *Torch*, now that this magazine has a new format. She urges more members of our club to attend the IATC Convention; the last one hosted by St. Catharine's was well-organized and very successful.

John introduced Dean Snow, who gave a thought-provoking lecture about his archeological excavations in 1972 on the site of the Battle(s) of Saratoga in October 1777, which he argues was the tipping point in the American Revolution. Up to that time, few people believed that the Americans could really win their independence from Great Britain. Dean directed a team of student archeologists, mainly from SUNY at Albany, supported by a \$2,500 grant, as they tried to find the three major redoubts that had been built by the British. The battlefield is quite large, equivalent in area to that of downtown Washington from the Capitol to the Lincoln Memorial, and they could excavate only selected portions. They found many artifacts and a skeleton, which Dean initially assumed was that of an American male soldier outside the walls of a British fortification. Later, after many discussions with other archeologists, he concluded that the skeleton was really that of a British female inside the fortification who had peered over the parapet and been killed by a blast of buckshot from an American musket. This was one of many puzzles that his team tried to solve. Dean cited another example: did Timothy Murphy actually fire the shot that led to the death of Simon Fraser, one of the British commanders (not the same as the founder of Simon Fraser University)? We must know how the rifles and muskets used by the British and American troops worked, and almost all history books repeat what is really a spurious claim. The team also excavated the burial site of Simon Fraser, whose body was later removed before 17 October, when the British surrendered, and no one knows its final resting place. They excavated the house in which Fraser died and ascertained from the many artifacts they found that he was accompanied by his wife, children, and servants. A lively discussion ensued, as members asked Dean about the number of shots Murphy that fired, whether the British fired back at him, the possible publication of his paper in Torch, Fraser's family (a large Scottish clan), other archeological digs and published studies on Saratoga, the subsequent careers of the student archeologists, German mercenaries and their views about the American colonists and Indians, how the fortifications were built, command of the terrain, what later happened to the battlefield, differences between male and female skeletons, later attempts to memorialize the battles, contemporary coverage of the event in newspapers, how the British interpreted their defeat, and why they dispatched forces north from New York City while also sending troops south from Montreal.

The meeting adjourned at 8:05 p.m. Eighteen people (fifteen of whom were members) attended.

The next talk will be presented by John Vincenti, about "Small Business Pitfalls," on 8 January 2014.

Respectfully submitted, Art Goldschmidt, secretary

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (8 January 2014)

President John Vincenti called the meeting to order at 6:50 p.m. Art introduced Louise Goldschmidt and his friend, Bob Ritzmann (a potential member). Dean Snow introduced Michael Hecht, a distinguished professor of communication arts and sciences at Penn State, for membership. Lee Stout moved that he be admitted; the vote in favor was unanimous. John Vincenti, who has worked with SCORE (Small Business Counseling) for more than seven years, gave an informative lecture on "Small Business Pitfalls."

Attendance: 13 of whom 10 were members and one was voted in. Next month's Torch Paper, by Dick Held, will be on "Current Conditions in Mexico's Economy" (a topic change what is in the brochure).

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (12 FEBRUARY 2014)

President John Vincenti called the meeting to order at 6:40 p.m. and asked all members present to introduce themselves. Treasurer Lee Stout being away, Cliff Bastuscheck reported that the club's books are in order. The secretary reminded the members that the next IATC convention will take place in St Catharines, Ont., from 18 to 21 June and that he and the president plan to attend. John added that he will send every member an announcement of next month's talk with an attachment to our new website.

Dick Held spoke on "Why Are the Business Experts so Excited about Mexico?" The country now has one-third as many citizens as the US, one-fifth its per capita income, spends \$700 per capita on healthcare compared with \$8,000 in the US, and its citizens have a life expectancy at birth of 75, while the US figure is 80. Although crime, drug-lords ("Narcos"), poverty, and public education are negative features, Mexico has a bright future. Nine million people in Mexico City (21 million in its metropolitan area) are thriving; poverty is vanishing. Mexico's assets include its infrastructure, notably roads and airports, air quality, the leadership of its newly elected President Enrique Peña Nieto, its auto manufacturing industry, NAFTA membership, influx of Asian manufacturing facilities, and a relatively low national debt. Mexico's political system resembles that of the US, except that the president has one six-year term. Its three major parties are the PRI (Institutional Revolutionary Party) that is currently in power, the National Action Party (PAN), which held power for twelve years, and the leftist Party of the Democratic Revolution (PRD). Some factories have moved from China to Mexico to be nearer the large US market, notably Samsung, so Mexico now ranks second as a supplier of electronics. The auto industry is growing, with \$15 billion investment planned in the next five years, and Mexico's annual hourly labor cost is \$7.80, compared with \$45 in the US and above \$50 in some European countries. Mexico now has more engineering students than the US, but the average engineer earns only one-third as much as his American counterpart. GE, GM, Honeywell, and Delphi have lately opened research and development centers in the country.

Dick, a frequent visitor to the country, cited Queretaro state and city as models for modern Mexico. The Bombardier firm that makes Learjets moved there in 2005, and it is also home to GE and Samsung. It has a new airport, a 12-lane highway connecting it to Mexico City, and the second largest shopping mall in Latin America. Americans living in Mexico see the drug problem as an American one, for 90 percent of its narcotics go to the US. For 75 years Pemex was Mexico's state-owned oil monopoly, paying \$60 billion as taxes and royalties to the government, but it was inefficient, lacked capital and know-how for development, and its output peaked in 2010. Now the state will let foreign oil companies explore for new sources; and he predicts that oil production may double by 2017 to 5 million barrels per day. Public education is weak due to a powerful and corrupt teachers' union; private schools serve wealthy Mexicans and have high standards. Many teach in English half the time; in Spanish the other half. As for taxation, 60 percent of all Mexicans pay no income tax, and the state just raised the value-added tax to 16 percent, adding sodas to taxable items because Mexicans are growing obese. Loopholes in the income tax and evasion of the VAT decrease Mexican government revenue, which is the lowest of the world's 34 most developed countries. Personal security is a problem; on average 75 kidnappings occur daily, companies secretly carry "ransom insurance" on their employees, and the legal system is corrupt and inefficient. Only one crime out of ten gets reported, and the courts get two convictions per hundred complaints. One bribes the policeman who gives one a ticket. More police are hired by municipalities than by the federal government. Vigilantes abound. Rich Mexicans and business firms spend heavily on guard dogs and private security. Carlos Slim (the son of two Lebanese parents) was the world's richest man from 2010 to 2013 because he owned Mexico's mobile telephone company as a monopoly, charging rates 40 percent above those charged in the US, but a new law limits his firm to a 50 percent market share, part of its policy to raise competitiveness, lower prices, and improve the quality of service. Dick gives Mexico's economy has an 80 percent chance of success due to its strong leadership, rising oil production, improving education, and a growing middle class. Members asked questions about Chinese industry, emigration of Mexicans to the US, trade with other Latin American countries, and the high crime rate. The meeting adjourned at 7:45 p.m. 14 members attended.

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (12 March 2014)

President John Vincenti, acknowledging the presence of a guest who may become a member, opened our dinner by asking each member and guest present to introduce himself or herself and identify sports they have played or like to watch, a gambit that helped all of us learn more about our fellow members. It also facilitated mealtime conversations. He called the formal meeting to order at 6:45 p.m. and let us know that he will attend the IATC Convention in St Catharine's this June. Tom Berner's photos are now on exhibit at Otto's and will later be displayed in Schlow Library.

John introduced Frank Deutsch, who spoke on "Mathletics: Mathematics in Sports." Based on a book by Wayne Winston, who teaches at Indiana University, called Mathletics (Princeton Univ. Press, 2009), Frank's talk explained the basics of gambling on team sports, mainly football and basketball. The common practice is to bet on what will be the point spread between the winning and losing team. The betting line, based on the perceived rating of the two teams, is set by a small group of sports consultants in Las Vegas. A typical bet is the 11/10 type, in which the bettor puts up (for example) ten dollars. If the game's outcome exactly equals the line, no money changes hands. If the score exceeds the line and the bettor wins, he puts up ten dollars and wins ten, and the bookie earns one dollar. The bettor must win 52.4 percent of the time just to break even, and few really make a living from betting on sports. The line may be changed if too many bettors put money on the underdog. Frank cited Steven Levitt's 2001 study of 20,000 bettors on NFL games, showing that the wisest strategy is to bet on home team underdogs. Bookmakers have power ratings on all NFL and NBA teams that enable them to set the predicted point spread, giving a 3-point edge to football teams playing at home (4 points to home basketball teams). Bettors may also wager on the total number of points scored by both teams in a football match. Frank also explained the rules for scoring college and professional football teams in games that need overtimes to determine the victors. This leads to careful calculations by competing teams as to whether it is more apt to win if it receives the ball (plays offense) first or second. The rules changed in 2012 for professional football teams.

Until then, the game's outcome was determined by a "sudden death" score, which favored the receiving team, which won 60 percent of the time. Now they have a "modified sudden death" system, giving each team a chance at possession unless the first receiver team scores a touchdown, but this still favors the team that gets to receive first. Steve Brams (2007) has proposed a "cake-cutter solution" that calls for placing the football on the line where each team has a 50 percent chance of scoring. One team chooses where to place the ball; the other gets first crack at playing offense. Frank then explained the current method for determining which college football team is the national champion, which as of 2014-2025 means that the four top-ranked teams face off (#1 vs. #4 and #2 vs. #3) in the Rose and Sugar Bowls on 1 January, and then the two winners play against each other in the championship match on 12 January. Frank argued that an eight-team playoff (four matches, two semifinals, and then a championship game) would work better. As for basketball, J. Wolfers (2006) claimed that 5.5 percent of all college games are fixed by players who have been bribed to slacken their efforts, i.e., "point shaving." This has led to past scandals at CCNY, NYU, LIU, Kentucky, and other universities. Wolfers' calculations were challenged by Heston and Bernhardt, who studied all games played 1990-2006 in which one team was favored to win by more than 13 points, and all games in which no betting was involved. In practice, if the favored team is ahead, it tries to hold the ball late in the game, even if it reduces its margin of victory. Frank chose not to report on Winston's treatment of the mathematics of baseball. In the ensuing discussion, members talked about betting on horse and dog racing, basketball playoffs (March Madness?), fortuitous effects on a team's performance such as sun and wind direction, the effect of marketing strategies, the NCAA's policy on sports betting, whether coaches' strategies are affected by betting odds, and Mike McQueary's admission that he used to bet on Penn State football games in which he was playing. The meeting ended at 7:50 p.m. Attendance: 19 (16 members, 2 spouses of members, 1 guest who is a potential member).

Next program: Mark Meckstroth, "Frederic Auguste Bartholdi: The Statue of Liberty and Other Works." at Celebration Hall, 9 April 2014, 6 p.m.

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (9 April 2014)

President John Vincenti called the meeting to order at 6:50 p.m. and told the members that they must soon elect a new vice president. The treasurer and secretary will continue to serve in 2014–2015.

He introduced Mark Meckstroth, whose topic was "Frédéric Auguste Bartholdi: The Statue of Liberty and other Works." He and his wife Meta had spent a fortnight in Alsace and had become interested in the Bartholdi Museum, the smaller replica of the Statue there, an allegorical statue of human figures holding up the world, and a bust of Albert Schweizer. Bartholdi (1834-1904), born in Colmar and educated in Paris, visited Egypt for the first time in 1855 and was impressed by its gigantic statuary. His inspiration came from Edouard de Laboulaye, who first proposed a statue of liberty in 1865, just after the passage of the 13th Amendment, as a gift from the French to the American people. Bartholdi revisited Egypt in 1868–1869 and attended the opening of the Suez Canal. Some historians believe that he presented to the khedive of Egypt a sketch for a lighthouse with a woman in an Egyptian peasant's gown with her outstretched arm, pointing the way for ships to the Canal, but Khedive Ismail did not accept the proposal. Instead, Bartholdi was commissioned by Laboulaye, who, together with descendents of Lafayette and Rochambeau (who aided the Americans in their war for independence), spearheaded a drive in 1874–1875 to raise \$400 thousand from the French people to pay for the statue. In the meantime, Bartholdi had visited the US for the first time in 1871 and saw New York Harbor, which he envisioned as the site for a statue comparable to the ancient Colossus of Rhodes. He produced the arm holding the lantern in time for it to be displayed in Philadelphia's Centennial Exposition in 1876 and later in New York's Madison Square Park (1876–1882). Visiting the US a second time during that 1876 Exposition, Bartholdi also presented a fountain, which now stands in Washington's Bartholdi Park, near the US Capitol.

His earliest statue was of the French Revolutionary and Napoleonic General Jean Rapp (in Colmar), and he worked on "Liberty Enlightening the World" under inspiration of the Colossus of Rhodes, a coin portraying the ancient Roman goddess Libertas, and the colossal statue of Carlo Borromeo, erected in 1697 and the first to use copper sheeting. Representing a country in female form (and Columbia as a symbol for liberty) is common. Examples include a fresco in the US Capitol, posters, currency, the statue atop the Capitol Dome, the Statue of the Republic for the 1893 Columbian Exposition, depiction of the Triple Entente in 1914, and even the iconic symbol for Columbia Pictures. He may have used his mother, or his wife, as the model for the woman. Alexandre-Gustave Eiffel, later famous for the Eiffel Tower, built the statue's internal structure. The work was assembled in France, then disassembled and shipped in more than 200 crates, arriving safely in 1885 to New York, where it was reassembled. Funds to build the pedestal were raised by the American people, and it was erected on Bedloe's (now Liberty) Island. The dedication took place on 28 October 1886, led by President Grover Cleveland. No women were allowed on the island for the dedication, but there was also a large parade in New York City, and Emma Lazarus's famous poem was read aloud and later placed on a plaque at the base of the pedestal in 1903. Among American sculptors influenced by the Statue of Liberty is Philip Ratner, who made many of the statues now on Liberty Island. Bartholdi's other works include the Lion in Belfort that is carved out of a mountain and honors France's resistance to the Prussian invasion in 1870, the Jean Rapp statue (1854), a monument to Admiral Bruat, a statue of engraver Martin Schongauer in front of Colmar's Underlinden Museum, the Lafayette statue in New York's Union Square, the Bartholdi Fountain, engravings on the Brattle Square Church steeple in Boston, and the Vincengetorix monument in Clermont-Ferrand France). A lively discussion ensued about the construction, funding, and present state of the Statue. 18 attended.

Next meeting on 14 May 2014: Update on the Value of Yogurt in our Diet—Manfred Kroger.

Respectfully submitted, Art Goldschmidt, Secretary

CENTRAL PENNSYLVANIA TORCH CLUB MINUTES (14 May 2014)

Vice President Steve Smith, acting for John Vincenti, who could not attend, called the meeting to order at 6:40 p.m. Manfred Kroger introduced his wife Goldie and son Steve; Steve Smith introduced his wife Michelle. Mark Meckstroth welcomed Ed Buss back after a long absence. Steve reminded members that we must elect a new vice president in June and announced that during the coming month he would be seeking paper presenters.

He then introduced Manfred Kroger, who gave an informative talk about yogurt and what it does for your body. He has coauthored the Encyclopedia of Fermented Fresh Milk Products (1992) and Consumer Health: A Guide to Intelligent Decisions (8th ed., 2007) and many articles and reviews. He spoke about our changing concept of bacteria, traditionally viewed as harmful to the body, whereas in fact the human body contains and indeed needs bacteria, including the types found in yogurt. When he first came to State College, it was impossible to buy yogurt, and he introduced it at the Penn State Creamery, thus popularizing it locally. He also corrected yogurt's definition in Webster's Third New International Dictionary, as well as that of acidophilus milk. As food science and probiotic labeling have grown in popularity, yogurt consumption has increased and the practice of medicine has changed. The positive uses of bacteria have compensated for the overuse of antibiotics. Kroger explained how yogurt, sourdough bread, kefir, and kumiss (fermented mares' milk) are made and how they can cure diseases just as well as more costly probiotic pills claim to treat. Creamery customers at first were shocked at the idea that the yogurt they were buying contained bacteria. He related how a Russian immigrant family founded a highly profitable American company to make and sell kefir (a milk product made from kefir grains) and told about Dannon Yogurt's founding by a family from Barcelona and of an Armenian family that started Colombo Yogurt. Another immigrant who introduced Americans to yogurt's benefits was Elie Metchnikoff, whose Prolongation of Life appeared in 1923.

Alexander Fleming's discovery of antibiotics in 1928 is well known in light of the expansion of the antibiotic drug industry since 1945 but the human body itself contains many bacteria that help children and adults to fight disease. We still know too little about probiotics, which, together with fiber and antioxidants, play a major role in prolonging human life. Our intestines, measuring in length 2.5 times our body height, or if their lining were turned into carpeting they would cover a whole football field, contain many areas where digestive processes occur. Medical science has paid much attention to the physiology of the brain, but less than it should to the study of the bowels. "You are only as healthy as your gut." Greater knowledge would help in the fight against obesity, diabetes, yellow fever, and that worst killer of young children: diarrhea, which causes a million deaths a year due to rotovirus infection and sometimes to radiation. Doctors should not overprescribe antibiotics, which kill good bacteria, of which we have some 200 different species in our intestines alone. Yogurt is a good preventive for "Delhi belly" or "Montezuma's revenge." He spoke about the experimental use of fecal transplants in rats to cure obesity. The study of the human microbiome will help us learn how better to treat diseases. He noted that annual consumption of yogurt in the US has risen from one to twenty quarts annually. Japan has produced much scholarship in the internal microenvironment and even sells a probiotic fluid product, "Yakood" (spelling?), in machines. Numerous types of yogurt are made and sold in India. He described how people make yogurt at home. There are various methods of flavoring yogurt. The sharp biting flavor of plain yogurt actually contains a poison. He speculated on the whey that is strained out of the yogurt: its contents and uses. Questions from members included whether yogurt can be made from skim milk, which is possible, but not from soy milk; how yogurt can solve the problem of lactose intolerance; whether the 200 varieties of bacteria in the human intestine ever clash; and claims that yogurt can serve as a means of mood management.

15 members and 3 guests attended. At the next meeting (11 June) Gary Miller will speak on "Frank Buhl: Turn of the Century Fuel Magnate."

Respectfully submitted, Art Goldschmidt, secretary

No minutes of the June meeting.