Speaker for September 21 MSSF Meeting

Anne Pringle

Is *Amanita phalloides* a European immigrant to North America?

The European death cap mushroom *Amanita phalloides* is hypothesized to be an introduced and invasive species in North America. California mycologists possess a valuable oral history which records the mushroom's appearance and spread within California counties. But to prove *A. phalloides*' invasive status, additional kinds of data are needed. Because *A. phalloides* is deadly, there is a rich mycological literature that records the distribution of the mushroom in America. This month's speaker, Dr. Anne Pringle, has undertaken both a comprehensive review of the available literature, and

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Mycena News

The Mycological Society of San Francisco, September 2004, vol 55:09

MycoDigest: The Mechanisms of Mind-Manifesting Mushrooms

Peter Werner

Psychedelic mushrooms, such as the blue-staining *Psilocybe* species and *Amanita muscaria*, have been of enormous cultural and religious importance for many thousands of years, continuing to the present day. Most people have a vague idea that these mushrooms have neurologically active compounds that affect the central nervous system, but are less clear on exactly how these compounds act to alter consciousness.

To understand how psychoactive drugs work, one must first understand the role of neurotransmitters. The brain and the larger nervous system are made up a complex series of specialized nervous pathways. The individual neurons that make up these pathways communicate with other neurons at sites called synapses. Synapses are pairs of projections, an axon and a dendrite, each from a different neuron; between the two is a gap called the synaptic cleft. Transmission of a signal from one nerve to another involves the release of a neurotransmitter from the axon, which then disperses across the synaptic cleft and binds to receptors on the surface of the dendrite. The binding of the neurotransmitter to a receptor causes the neuron to either release or take up calcium ions, altering the neuron's electrical potential and either stimulating or inhibiting the movement of electrical pulses along the neuron to axons elsewhere on the neuron. Once an axon receives an electrical impulse, it releases neurotransmitters, continuing the chain of nervous signals.

There are many different neurotransmitters, such as serotonin, norepinephrine, dopamine, acetylcholine, GABA, and many others. Different neural centers and pathways in the brain use different arrays of neurotransmitters to transmit nervous signals. The actions and processes of the brain are determined by which of these centers and pathways are stimulated and which are inhibited.

Neuroactive compounds function by mimicking the action of specific neurotransmitters; they bind to the same receptors, where they act as either antagonists, agonists, or reuptake inhibitors. Agonists and antagonists both bind to the receptor sites of an analogous neurotransmitter, however, they differ in how they act once they bind to these sites. Agonists cause the neuron to transmit or inhibit a nerve impulse just like the actual neurotransmitter would, while antagonists simply block the binding of neurotransmitters without stimulating the neuron. A reuptake inhibitor slows the axon's reabsorption of a neurotransmitter, making the neurotransmitter available to the receptors for longer, hence prolonging an incoming nervous signal.

The blue-staining *Psilocybe* and *Panaeolus* species get their psychoactive properties from the high levels of psilocin and psilocybin that they contain. (The blue staining is directly correlated with psilocin content, as it results from the oxidation by air of an

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MycoDigest is a section of the Mycena News dedicated to the scientific review of recent Mycological Information.

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a formal evaluation, to the molecular level, of herbarium collections. This research suggests that the North American populations of *A. phalloides* are in fact introduced and that *A. phalloides* is invasive. Bi-coastal comparisons of North American and European *A. phalloides* have helped answer questions of biogeography. Although data collected for invasive species of fungi are typically collected from plant pathogens, *A. phalloides* is a plant mutualist. Therefore, the invasion biology of *A. phalloides* may suggest common mechanisms of invasion by microbial mutualists.

Anne Pringle grew up in Southeast Asia and West Africa. She worked in women's health care projects in Mali, received her undergraduate degree from the University of Chicago, and spent several years as a science teacher in Brooklyn, New York. Anne completed her Ph.D. dissertation at Duke University, where her research topic was "Ecology and genetics of arbuscular mycorrhizal fungi." She is currently a post-doctoral fellow at UC Berkeley, researching the invasion biology of *Amanita phalloides*. In June, 2005, Anne will join the faculty of Harvard as an assistant professor in the Department of Organismic and Evolutionary Biology.

Terry Sullivan reports: "During the first week in July I fulfilled my dream of hiking the Ruby Mountains just outside of Elko, Nevada. The Rubys, misnamed when garnets were mistaken for rubies, are known as the "Alps of Nevada" because they rise 13,000 feet and glaciers carved the valleys and peaks. The wildflowers were at their peak bloom, and mushrooms were growing in the wet areas along with the flowers. The large puffballs we found generously fed our group of nine."

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MSSF Discussion Group on Yahoo Groups

The MSSF email discussion group facilitated through Yahoo Groups is a great way to keep in contact with other members and is one of the primary ways in which members keep up on news about the Society. The list features often-intriguing discussion of fungal-related topics, tips about current fungal activity, and up-to-the-minute news about MSSF functions.

The list is available in both individual-message and digest formats. Additionally, you can also subscribe to the group in "Special Notices" mode. That means that if you wish to receive only official announcements from the society and not email traffic from other members, you can subscribe using this method. (Subscribers to the list in regular and digest formats also, of course, receive official announcements in addition to posts from other members.)

To sign up, go to:

http://groups.yahoo.com/group/mssf/

Follow the link that says "Join This Group". (You will need to sign up for a free Yahoo Groups membership if you do not have one already.)

The Foragers' Report

Patrick Hamilton

Here we go again. A new season. Another chance for the daring foragers of our dashing society to shine down their wisdom upon us.

Gosh, wasn't it only two weeks ago (from August 15) that some were picking armloads of morels high in the Sierra? I heard that many were left in situ. Not because of any ethic that demands leaving some for somebody else—only that there were too many to pick for this particular person.

Anybody seen anything around here yet?

We are fungally blessed living in "our area." The season is the longest, anywhere. From early September to late August (that would be pretty much the whole year), fairly close by, we can pick some fine edibles—and picking for the table is really what this column is mostly about.

This year we are going to pay attention to one, or two, mushrooms that should be in season when you read this. Information to lead you, not astray, but to unfound treasures awaiting your gleefully outstretched hands.

We also will return the recipe portion to this monthly offering. One was included here some years ago. Some of you know that your reporter used to be in the food business and that he does a chef demo each year at our fair. Easy-to-follow-recipes, maybe not, but heck—you're used to reading this.

In Sebastopol a Boletus edulis was found, already, last week. It is not known by me if it was with Bishop Pine or, where many are taken in Sonoma county, live oak. Sulfur shelves will be seen soon oozing their bright yellow-orangeness out of tree crotches and other places less visibly interesting.

For members who don't know about those late season "burn" morels recently found allow this: "Grays," as they are called, are probably the very best tasting of all. Chefs "oh and ah" and even drool at the possibility of procuring them for their tables. It says here that I agree with their rating.

It also says here that the best way to get some is to keep going back to a burn area, even deep into the summer, if the fire was at elevation over 6,000'. Thunderstorms bring enough moisture to cause continuing fruitings and it is usually after the black morels come and go that the grays begin to appear.

Thinking about the thunderstorms in the mountains reminds me that last year Sierra "fall" boletes actually popped in the late summer. Two of us will be going up to look this weekend and I suggest that any of you who can soon get up there too.

One of the situations presented in writing a column such as this is trying to figure out the readership. Are newbies searching here for good tidbits so that their stocks of mushroom knowledge truly do go up in value? And, if so, how to avoid being boring and pedantic to long time members who already know stuff?

Knowledgeable pickers may leave the column for a paragraph now.

Boletus edulis, the fall mountain delectable which grows in our Sierra, is found at fairly high elevations. Go up past the black oaks and incense cedars, above the dogwoods, and look beyond where the ponderosa pines grow. Learn to identify the Lodgepole Pine (Pinus contorta var. murrayana) and, when you do, start your search for a much favored fungus. These are easier to find than our later fruiting shore-side porcini and much better tasting than spring boletes.

Now that you all are back let's do the recipe. The following was made up due to a client asking if I could use any bear. I didn't give an answer quick enough, so he handed me three large freezer packages of California black bear ground meat. I am not a hunter but I thought, what the heck's wrong with eating some dead bear? We eat other wild things that grow in the woods. And bear is sort of similar. Kind of.

I took this to a party of foodies recently and no one mentioned that they don't eat bear—either anymore or never. It really is a very fancy meat loaf recipe that can be made with any meat you choose. Bear does make it special though.

Bear and Porcini Pate

Amount	Ingredient
2 oz	porcini, dried
3 cloves	garlic, minced
4 tsp	olive oil
1	medium onion, chopped small
2	shallot, minced
2 tbsp	brandy
2	eggs, large
1/2 tsp	thyme, dried
1/2 tsp	Greek oregano
1/3 tsp	Italian parsley, finely chopped
2 tsp	sea salt
1/2 tsp	black pepper, fresh ground
2 tsp	Dijon mustard
2 tsp	Worcestershire sauce
1/4 tsp	Tabasco sauce
1/2 cup	heavy cream
1 1/2 lb	bear, ground (may substitute any game or ground beef)
1/2 lb	pork, ground
2/3 cup	quick oatmeal or panko crumbs or combination)
10 slices	bacon, thick-sliced
1/2 cup	catsup (homemade preferred)

1. Rehydrate the porcini in hot water. Set aside. (When softened, squeeze out, save the water.)
2. Heat oven to 350. In 2 teaspoons of the olive oil sauté the onions, 2 cloves of garlic and the shallot for 4 minutes. Add the brandy and cook for an additional 2 minutes to burn off the alcohol. Set aside.

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unidentified compound that is produced by the degeneration of psilocin.) Psilocin is directly resposible for the psychoactive properties of these mushrooms, as psilocybin is simply converted by the human bodyto psilocin by a simple dephosphorylation reaction. Psilocin is a close relative of the neurotransmitter serotonin and its resemblance to serotonin is what is responsible for its psychoactive properties. Psilocin binds to a specialized type of serotonergic receptor know as the 5_HT2a receptors, where it acts as a partial agonist, stimulating some neurons but not others.

How these nerve actions translate into the characteristic psychedelic experience is still not fully understood. One hypothesis is that the increased activity of the sensorimotor gating system of the brain, which normally functions to channel the majority of sensory stimuli from conscious awareness. The conscious mind is therefore overwhelmed by sensory stimuli and cognitive processes that are normally not consciously experienced. In fact, one of the centers of the brain through which sensorimotor stimuli are filtered is the locus coeruleus, which has a very high concentration of 5-HT2, receptors. (It should be noted, however, that there are other hallucinogens such as ketamine that do not act on the locus coeruleus.) If the sensorimotor gating hypothesis of hallucinogenic action is correct, then Aldous Huxley's restatement of Blake's dictum, "If the doors of perception were cleansed every thing would appear to man as it is: infinite" is in fact a worthwhile metaphor.

The effects of *Amanita muscaria* are caused by an entirely different set of compounds which act in a very different manner than psylocybin mushrooms. *Amanita muscaria* contains ibotenic acid and muscimol, though only muscimol is directly responsible for the mushroom's psychoactive effects; ibotenic acid is converted to muscimol when the mushroom is dried. Muscimol is a GABA agonist, and its actions on the brain are even less well understood than are the actions of psilocybin. GABA is thought to be a "master inhibitor", blocking the firing of many other neurotransmitters throughout the brain. Muscimol therefore inhibits the release other neurotransmitters at many different sites, but exactly which neural centers and pathways are affected and how this translates into the characteristic *Amanita muscaria* experience is not understood. The fact that muscimol acts in such a general manner in the brain is perhaps the reason why *A. muscaria* is associated with such a wide range of autonomic effects, such as alternations between sleep and wakefulness, as well as excessive salvation.

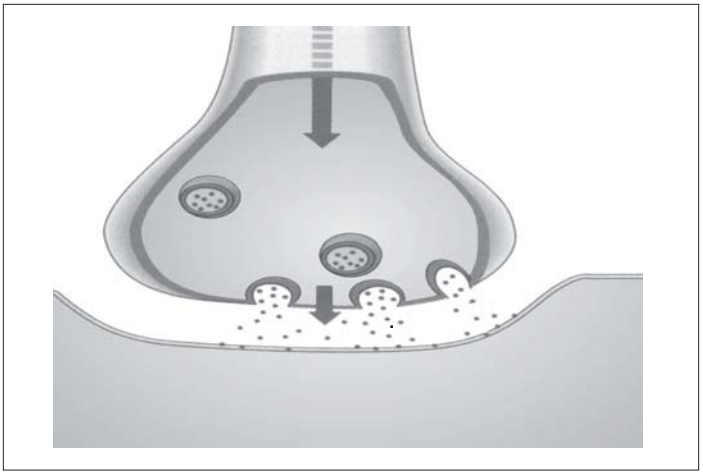

Fig 1: A basic diagram of synaptic action showing the release of neurotransmitter from an axon (**top**) to binding sites on a dendrite (**bottom**).

The striking effects that these mushrooms have upon awareness has lead to a great deal of fanciful speculation about their role in nature and human culture. A widespread "theory" that has gained far too much currency in recent years is the assertion by the late Terrence McKenna that *Psilocybe* is in fact some sort of extraterrestrial life form that has come to this planet to raise human awareness. Needless to say, there's no evidence for this assertion and quite a bit of evidence against it. It is quite clear from the study of the morphology, physiology, and molecular sequences of fungi and other organisms that *Psilocybe* is a perfectly ordinary agaric closely related to other agarics and that fungi as a whole fit perfectly well into the phylogeny of eukaryotes, being in fact more closely related to animals (including ourselves) than they are to any other group of organisms. An extraterrestrial organism, if we were to ever encounter one, would almost certainly have a biology that in fundamental ways would be different from the organisms of the Earth.

Its is also often asserted that psychoactive compounds in plants and fungi exist as a sort of mutualistic adaptation to humans. It is reasoned that humans enjoy the effects of psychoactive plants and fungi, and therefore humans deliberately propagate them, creating an adaptive advantage for organisms that are psychoactive. This argument could be extended, of course, to any cultivated plant, and it should be obvious that there are many edible plants under far more intensive cultivation than any psychoactive plants. More importantly, such anthropocentric speculations ignore the fact that hominids have only been on this planet for a tiny portion of Earth's evolutionary history and that most groups of plants and fungi have been around far longer; humans are therefore unlikely to have played any significant role in the evolution of hallucinogenic compounds.

The role of insects and soil organisms in the evolution of such compounds is a far more likely course of events. It has been demonstrated that cocaine disrupts insect feeding behaviors and inhibits their feeding upon leaves containing cocaine; psilocin and psilocybin (which are present in mycelium as well as fruiting bodies) may very well protect fungal tissue in a similar manner. It has been observed that LSD, which acts on the same receptor sites as psilocin, causes marked behavioral changes in *Drosophila*.

It would seem, then, that the ability of some plants and mushrooms to alter our consciousness is simply a by-product of a much earlier process of coevolution. This of course, is true of much of the natural world – wild raspberries are tasty so that they can attract seed dispersers and orchids are showy to attract pollinators. Our own aesthetic pleasures and transcendent experiences are incidental in the larger scheme of things, but then, why should we need a grand purpose to enjoy such benefits?

Further reading:

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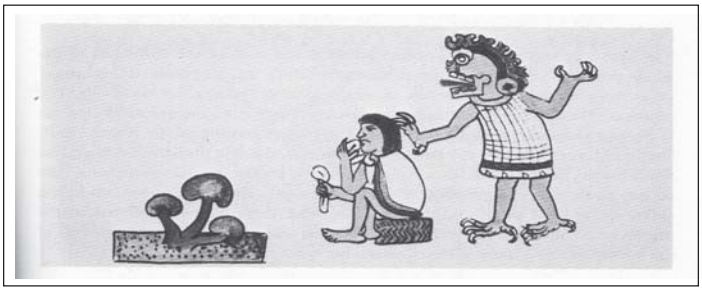
Vollenweider FX, Geyer MA. 2001. *A systems model of altered consciousness: Integrating natural and drug-induced psychoses.* Brain Research Bulletin 56:495–507.



Foragers' Report

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3. Sauté the porcini in the remaining oil and garlic. Just before they are done add some of the soaking liquid and reduce au sec. Continue adding the liquid in batches until all is gone. Set aside.
4. Mix the eggs with the herbs, salt and pepper, mustard, Worcestershire and Tabasco sauces, and cream. Add this, with the porcini and onions, to the meat mixture in a large bowl. Mix with your hands until blended and the mix does not stick to the bowl (if it does add some more cream—if too soft add some more crumbs or oatmeal).
5. Put the mixture into a glass baking pan that has been brushed with 1/2 the catsup and that will fit the amount of pate. Place the bacon strips atop and roast until the temperature in 160 (about 1 hr).
6. Remove the bacon (save and eat it separately) and serve the loaf sliced hot, cold or at room temperature on crackers with blueberry sour cream sauce atop and a garnish of chives.

Blueberry Sour Cream Sauce

Amount	Ingredient
1 cup	blueberries
1/2 cup	port wine
2 tbsp	Marsala wine
1/3 cup	sour cream

Poach the berries with the wines until softened. Puree in blender when cool enough. Place back in pan and cook until thickened a bit and reduced by 1/2. When cool, mix into the sour cream. May add tarragon, etc., depending upon what you are serving it on.
That's all for now folks.

Cultivation Corner

Ken Litchfield

It may be the most unlikely mushroom season right now; August, September, and October are the parchest months of the California dry season. But this is the prime hunting season for one of the easiest to identify and most productive mushrooms to collect, *Laetiporous gilbertsonii*, the Sulfur Shelf or Chicken of the Woods (or Chicken Mushroom to keep from confusing it with the Hen of the Woods, *Grifola frondosa*.) It is also a mushroom that you can grow, without too much difficulty, in your garden.

Check the eucalyptus trees around the bay area now for the yellow and orange blobs extruding from cut stumps or branch hollows. It looks remarkably like someone stuck a can of yellow spray insulation inside the stump or hollow and blew it up. You can often find 10, 20, or 30 pounds of golden cauliflower shaped blobs oozing out of cracks on the shady north side of the stump or tree. Before they enlarge and differentiate into orange polypore shelves with undulating yellow picotee edges, in the tender young egg yolk stage they look like yellow cauliflower heads. The same stump is reliable year after year in season.

The best time to collect the mushroom is in the egg yolk stage. It is tender and juicy, often oozing nectar from the pores, and very similar in texture to raw chicken breast. You can also slice off the growing yellow picotee edge of the more mature shelves and then come back later to harvest more new growth from the cut edges. This mushroom can't be eaten raw in any consequential quantity without getting nauseous. This is due to inherent "puke principles" in the mushroom, not to oils or resins in the eucalyptus. Even when tasting it raw there is no resinous eucalyptus flavor. The puke principles in the mushroom are heat sensitive and can be destroyed with 15 minutes of cooking time. If you don't cook it long enough nausea or intestinal upset is all that will happen, usually within 30 minutes of eating. It is a puker not a liver lover. All you will need if nausea happens is a little digital uvulation to upchuck and then feel fine, not a liver transplant to save your life.

Though eucalyptus is not a native tree it is the favored wood for the Sulfur Shelf in the Bay area. Any eucalyptus log or stump that you find sprouting sulfur shelf and can be moved to your garden is the most straightforward way to start growing it. Often when collecting the fresh egg yolks or shelves there may be large hunks of tough basal mycelial mass. This can be used to stuff into cracks and hollows or holes drilled into the fresh eucalyptus logs and stumps. At the end of the fruiting season, when the old shelves turn grayish white, you can collect these crumbly sporocarps and use them in the same way. The more

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massive the wood is, the more years that it will bear fruit. And when you are out and about during the Sulfur Shelf off season keep an eye out on any likely eucalyptus for the dried and crumbled shelves so you can collect them or come back to that tree during the fruiting season.

Another way to try to cultivate the Sulfur Shelf is to get a garbage bag of freshly chipped eucalyptus wood. Fill it with water to break the surface tension of the chips and soak up some water, drain them, and pile them over a stump of freshly sprouting Sulfur Shelf six inches to a foot deep. The emerging egg yolks will now have to reemerge by growing through the thickness of the chips. Once they have reemerged through the chips and have started differentiating into shelves the whole mass of chips and fungus can be scooped back up into a bag, moistened if necessary, and left closed up in a shady place for a few weeks to grow out. If the bag of chips begins to coalesce with mycelium it can be added to a larger heap of fresh and wetted chips piled over an exposed eucalyptus stump and left to fend for itself with for periodic watering.

A sometimes easier way is to order mycelium impregnated wooden dowel plugs from one of the commercial fungi growers and sellers. These can be inserted into 5/16 or 3/8 inch wide holes drilled several inches deep into Oak or hardwood logs. The dowels are about an inch long so several of them can be inserted into each hole before it is full, when the hole is sealed with melted paraffin. You can then bury the log partly in the ground or use it with others lined stockade style to make a raised bed. The log will get moisture from contact with the soil on the bottom and side. The dowels you order will probably be *Laetiporous sulfureous* which likes oak and hardwood instead of *gilbertsonii* which prefers the eucalyptus. But you can try the *sulfureous* on eucalyptus, too, in fact plugging down low and deep into the heartwood of any tree that you know may be slated for later removal.

You can prepare the Sulfur Shelf by slicing it into 1/4 inch thick fillets, and lay them out to cover the bottom of a skillet. Then add a second layer over the first by covering the gaps and overlapping the fillets of the first layer. You want to keep the fillets thin and layers shallow to expose as much surface area to heat penetration as possible. Add enough sherry or white wine to cover the slices and shake the skillet back and forth to make sure the liquid gets between the slices and the pan so they don't stick and burn. Then cover the pan with a lid and simmer at least 15 minutes. This will be the precook and you can let them drain and cool on a plate and then put them in zip lock bags to freeze for later use. Thaw and treat them like you would chicken fillets and cook them batter fried, barbecued, teriyakied, etc. If you would like to try a light lunch, rather than simmering for the full

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Myxophiles to Gather in November

Our November speaker, Bruce Ing, is also giving a workshop on slime-molds (aka myxomycetes) while he is here. Now is the time to mark November 27 on your calendars for this very special event.

If you aren't familiar with slime-molds, they come in many colors and shapes, from metallic balls to big yellow or orange blobs on decaying wood and vegetation. Mushroom hunters see them on the forest floor, but they also grow in the tree tops. They look vaguely fungal but are not true Fungi (like boletes and chanterelles), and have followed a separate evolutionary trail. Slime molds are truly remarkable organisms which, for a time, stay in one place and then reorganize themselves into a kind of amoeba and move on!

Bruce is delightfully described on a Welsh web-site as "a local mycologist from Mold." It is the perfect address for someone who specializes in slime-molds! Bruce recently put a lifetime of experience into the "Myxomycetes of Britain and Ireland" (1999), the first such monograph to cover the British Isles in over 100 years. Before retiring, he taught on the English side of the border in Chester College and has led countless forays for the British Mycological Society to obscure corners of the British Isles, various parts of continental Europe and elsewhere. However, this will be his first visit to California. He will be here for about two weeks and there will be several opportunities to meet him; look for more information later.

Bruce's workshop is a unique opportunity to expand your mycological horizons; you will learn how slime molds live and how to identify them. The workshop will take place on Saturday, November 27, in a well-equipped teaching lab on the Berkeley campus where everyone will have the use of a microscope. It will run from 10:00 until 5:00 and will be limited to 20 people; the cost is $35. Please contact John Lennie at jlennie@comcast.net to hear more by email. Even better, and to be sure of a place, make out a check now for $35 (payable to "Mycological Society of San Francisco") and send it to

John Lennie
861 Keeler Avenue
Berkeley, CA 94708-1323

Multiple year memberships now offered: When you think of renewing your MSSF membership this fall, you can now decide whether you would like to renew for more than one year at a time, or for your lifetime. Longer-term memberships mean less hassle for you and less work for the Membership Chair. The Council recently approved a set of rates for multiple year memberships as follows:

Multiple year membership rates approved by MSSF Council for renewals beginning Jan. 1, 2005:

	1-yr	2-yr	5% 3-yr	10% 5-yr	20 x 1-yr Lifetime
Regular	$25	$50	$71.25	112.50	500.00
Senior	$20	$40	$57.00	90.00	400.00
Student	$20	$40	$57.00	90.00	n/a
Electronic	$15	$30	$42.75	67.50	300.00

Memberships are for calendar years, beginning in January and ending December 31. You are urged to renew in the fall, so that you will receive your January newsletter on time. The mailing list for the January newsletter is sent to the printer in mid-December. If you have not renewed by then, your name and address will not be on the list.

The four categories of membership are:

Regular: This is an adult/family membership. Up to two people can be listed on the membership form. Regular members receive the yearly *Roster* of members and the *Mycena News* by mail. The *Mycena News* is mailed each mushrooming month, from January through May and September through December.

Senior: This is for seniors over 65 and includes all the privileges of regular membership.

Student: This is for full-time students who receive both the membership *Roster* and the *Mycena News* by mail.

Electronic: E-membership is open to everyone. E-members, however, do not receive either the yearly *Roster* or the *Mycena News* by mail,. They must download these documents for themselves from the mssf website.

Members in all categories are eligible to sign up for inclusion in the information sharing Yahoo group. Consult the MSSF website www.mssf.org for information.

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15 minutes, at 5 minutes open the lid, season the fillets to taste and add an over lapping layer of thin sliced summer squash from the garden, cover and simmer for another 5 minutes. Then add a layer of fresh basil or dill for another 5 minutes. Then add grated cheese on top to melt for another 5 minutes. With a couple of toasted slices of honey wheat berry bread it is a light and nutritious meal for the heat of summer. For an interesting alternative, when you slice the fillets place them on a drier screen in the fridge to dry out a little for about an hour so they become very absorbent. Marinate in red wine so the fillets soak up a nice salmon color, drain and cook them with butter, sherry, dill, and a little salt and pepper. If you have some fresh salsify root peel and grate it fine to add to the other ingredients an oysterish or fishy flavor for your vegetarian salmon.

MYCOLOGICAL SOCIETY OF SAN FRANCISCO – Membership and Membership Renewal Application

New Members please fill out as much information as you can. Members who are renewing need to fill out only the blanks for which information has changed within the last year. Please check the current *Roster* to see if any of your address, phone, and email need updating!

Name 1:_____ **Home Phone:** _____

Name 2:_____ **Business Phone:** _____

Street/Apt#/PO:_____ **Cell Phone:**_____

City:_____ **Email 1:**_____

State:_____ **Email 2:**_____

Zip Code:_____ **Interests:** _____

New Membership?____ **Renewal?**____

Membership type:

Please return the filled out form along with your check made out to "MSSF membership." Or mail the form and check to: MSSF Membership, c/o The Randall Junior Museum, 199 Museum Way, San Francisco, CA 94114

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MSSF Calendar, September, 2004

Monday, September 13: Culinary Group Potluck Dinner. For more information contact Arturo Carvajal at alvaro.carvajal@sbcglobal.net or 415-695-0466.Future Culinary Group Dinners (all Mondays): October 4, November 1, January10, February 7, March 7, April 4, May 2, June 6, 2005

Tuesday, September 21: MSSF General Meeting: Randall Museum, doors open at 7:00 pm. Anne Pringle will speak on "Is *Amanita phalloides* a European immigrant to North America?"

Saturday, November 27: Myxomycetes workshop with Bruce Ing. $35 per person, limited to 20 people. For more information, contact John Lennie at jlennie@comcast.net.

Saturday and Sunday, December 4 & 5: Fungus Fair: Oakland Museum 10-5 Saturday, Noon-5 Sunday. Speakers, cooking and dyeing demos, mushroom oriented vendors, kid art projects, mushroom soup sales, and fungal displays galore. For more information or to be part of the planning committee contact Ken Litchfield at klitchfield@randallmuseum.org, 415-863-7618 or Dan Long at danlong@astound.net, 925-945-6477.

Saturday, January 15-Monday, January 17, 2005: SOMA Camp. Featured speaker Dr. Tom Volk, with special guests Gary Lincoff, Paul Stamets and Jim Trappe. For more information visit www.somamushrooms.org or call 707-887-1888.

Save The Date!
All-California Mushroom Clubs Foray
Albion, CA
February 4-6, 2005
More information in the October Mycena News.