A PSYCHOLOGIST IN AMERICAN NEUROPSYCHOPHARMACOLOGY
OAKLEY RAY

You began in 58 doing clinical psychology.

When I went to graduate school at Pitt I insisted that I go in clinical. The people there said "all your scores would suggest you would do better in research". I said no and got my degree in clinical psychology but at that time when you took a PhD in psychology everyone took the same course work, the only difference between clinical and experimental was what you did in the afternoon - if you were clinical you went to a clinic, if you were experimental you went into a lab. When I finished my dissertation I had half a year to go before I got my degree and I was bored to tears with clinical work. I was at a VA mental hygiene clinic. You went in at 8 o'clock and had coffee and doughnuts and then at 9 o'clock you saw a patient until about 10.30 and by that time it was almost time to go to lunch and so on. I said I've got to get out of here and see if I can get some human research. At that time the only person in a VA hospital in Pittsburgh doing research was Larry Stein but he was doing animal research. I went and talked with him. His first reaction was well there's no place for a clinical psychologist here but since I had all the experimental course work I could talk about Kennett, Spence and Hull and their theories, he said okay why don't you come in. I joined the lab and fell in love with animal research. Larry didn't like organising the lab, the nitty gritty things which I can do in my sleep and so within three or four weeks I was running the routine things in the lab. I felt if I could take some of the worry with technicians and this and that, that would help him and besides it was a good experience for me. At that time back in 1958, 59, 60, if you wanted electrodes for brain stimulation you made them - you couldn't go out and buy them. Just about anything we did we had to do with our hands. Larry was the person who introduced me to physiological psychology.

By physiological in this context you mean what. Its a term that has slipped out of use.

It just means looking at the biological basis of behaviour. At that time, that would range all the way from the electrical stimulation of the brain and the chemical stimulation of the brain that Alan Fisher was doing at University of Pittsburgh. Alan had gone to McGill to talk with Donald Hebb and the story is that he said I want to become rich and famous like Jim Olds - what can I do? Hebb scratched his head apparently and said "well Jim is doing electrical stimulation of the brain, why don't you do chemical stimulation?" And so then he started tracking down the cholinergic system in the brain and he would have gone on to really good things except for his untimely death. But that's what I mean by physiological psychology. It goes back to Lashley and the ablation studies and other things he did, which are still very germane.

Anyway I started with Larry and really found a home in his lab. Larry had started his post-doctoral research with Joe Brady who came out of the University of Chicago to the Walter Reed Research Institute and set up a behavioural lab with Murray Sidman. It was a golden time for experimental psychology because it was during the Korean War and all these bright people who were graduating didn't want to go to Korea and so they became Privates in the army at Walter Reed and did research there. They had, it seems now, almost unlimited funds. David Rioch was there, the neuroanatomist and Murray Sidman, and Peter Calton and Eliott Hearst as well as Larry Stein and many others. Irv Geller was there as a technician but people told

him he was wasting his time and he ought to get a PhD etc and come back. It was through Larry and his connections that I got to know anybody at all in psychopharmacology.

At the time we were linked to Amadeo Marrazzi who had done very early drug stimulation of the brain. He was the first person, I believe, to show the activity of a drug on an actual living brain using a transcallosal preparation. His problem was that he got hooked on the technique and that's usually a kiss of death in a fast moving research area. It was certainly his kiss of death because he had a great set up with lots of money - back in 1958 he had a budget of over $100, 000 to run a lab. Ross Hart who was a pharmacologist was there and Mel Gluckman a biochemist and Larry Stein and he had a neurosurgeon to do transcallosal preparations. I got a chance to learn some biochemistry and pharmacology and neuroanatomy that I hadn't learned before. It was a good place to interact. The problem was that if Amadeo had a choice of either helping you or hurting you or leaving you alone, he would hurt you because he had a belief, it seemed, that the further down he pushed you the higher up he seemed to be. As a result almost everybody who went through his labs saved most of their good material and didn't publish it while they were there because he insisted that his name was on it. He drove all of us away ultimately and there was a scandal because of the way he was using Japanese doctorates and not paying them even a living wage. He treated me very well even though I didn't publish a whole bunch because I saved it like everybody else.

Back in those days I gave papers at Mid Western Psychological Association, the Eastern Psychological Association and the ASPET meetings, as well as the American Psychological and FASEB meetings - five meetings per year. We had a big enough lab that you could turn out different papers for each of those. In the process of that I got to know Irv Geller who was then at Wyeth running a lab. He came to Pittsburgh to see if I was interested in a job. I remember Irv, his boss, Larry and me were in East Liberty in a restaurant having dinner. I told Larry I wasn't interested because my wife was teaching, my kids were beginning to come along and we were happy bunnies in Pittsburgh. I had already turned down an offer to go to the Neuropsychiatric Institute at UCLA, that was run by Ted Magoon. He came to visit Marrazzi's lab because they were old buddies. I was really tempted because Jim Olds and Keith Killam were there and it was an exciting time but my wife was teaching and finishing up her degrees, and it was close to my family and her family. Who wants to go across the country and never see anybody again? So Larry said do you care if I apply for the job and, in fact, they ended up offering Larry a job - a different and even better position.

Larry left and Amadeo wanted to get some else in with the kind of reputation that Larry Stein had. So he called everybody in the world - Gordon Bowers and Joe Brady and others but he couldn't find anybody. Finally he offered me the job. It was exactly what I wanted because I could stay in Pittsburgh and I was running the lab anyway. Marrazzi's problem was that he could never spend his money. The fiscal year ended at the end of June - so he would call me about the last week of May and say Oakley "can you spend $20,000 in the next two weeks?" I could always spend $20,000. So we bought equipment like crazy and I tripled the size of the lab. As far as that went everything was fine and I had enough hard-working graduate and

undergraduate students from Chatham College where I was also teaching in addition to the University of Pittsburgh.

About 1959 when I had finished my VA internships, I went on a NIMH postdoctoral program for two years and then I was put on staff in the VA. A while later a fellow called Elston Hooper came by from the VA central office in Washington. He was in charge of the VA Psychology Research Program. He said "well Oakley you've got a nice operation here, anytime you want a lab of your own let me know". I grabbed him by the arm and said "I'm letting you know". We were at Leech Farm VA Hospital where Marrazzi had the whole top floor of building number 1. We started the machinations and after about six months I set up my lab in the same hospital but in a different building - in the old insulin shock therapy ward. One of my animal labs over there was in the hydrotherapy room when they had taken out the tubs. So I moved across with VA and NIMH money and Child Health and Human Development money and NSF money for the summer educational programs for high school science teachers.

I was very happy there and with what I was doing when in 1969 I got a letter from Vanderbilt University asking if I had any students ready to be a distinguished associate professor. I wrote back and said I didn't know any distinguished associate professors but I like to travel and talk and I'd be glad to look at the job myself. They explained to me that they needed somebody to take over the multi-disciplinary graduate training program in psychopharmacology and to be an associate professor in the department of psychology. I gave a talk to the psychology people and the following weekend I gave a different talk in the Medical School to Allen Bass' Department of Pharmacology and before the weekend was out they offered me a job as a tenured professor. My wife and I thought about it and we decided we would move. So I picked up the phone and called Dick Fowler who was then in charge of research in the VA in Washington and said "Dick I'm not going to be putting in my request for VA funding for next year because I am going to leave the VA and go and be an academician". I could move the other grants but not that one. He said "don't do anything for three days and I'll call you back". In fact did call me back on Friday and he said I want you to think about the possibility of moving your whole lab to Nashville and staying in the VA and being Chief of the Psychology Service at the VA hospital there as well Professor of Psychology and Associate Professor in Pharmacology.

The VA in Nashville didn't have a psychology service there then. As in many places, they had a psychiatry service and psychology was a section of it. That didn't fit very well with the people in Washington and they were not about to put one of their prime research people into a psychiatry service. But since I was a clinician and had my licence and had become President of the Pennsylvania Psychological Association, when I went down to Nashville the people in the VA said yes we are willing to set up a Psychology Service and they did. So I essentially ended up with the best of all worlds.

Can we hop back to what you were researching?
One of the things that happened while I was in Pittsburgh is that there were a couple of guys, Zivic and Miller, who wanted to start an animal breeding colony and they started breeding faster than they could sell the animals. So I bought animals from

them at 25 or 50 cents a piece when they were typically going for maybe 3 or 4 dollars each. This meant that we could do a whole bunch of studies that required large numbers just because we could afford to do it - nobody else could. Partly because of that we got into genetic studies. Because I was looking at mechanisms of learning, I wanted to try animals from different breeders etc. We ran one study which we wanted to replicate but we couldn't. We scratched our heads and looked at everything - the time of the year, was it hot, was it cold - we tried to control everything. I finally called the people, not Zivic and Miller, where we bought the animals and said tell me how you pick the animals that you ship out to researchers. What happened, it turned out, is that the way that they pick their animals was not really as random as they thought. Incidentally, they changed the system because of our study. For example, now if I wanted 60 day old males, they would take five from colony A, five from colony B etc but what had happened the first time was that the only place they had 60 day old males was from one colony. So I got a unique genetic population and because of this we couldn't replicate our data which led us to study genetic effects on learning and performance.

I was also running LSD, Psilocybin and mescaline studies in rats but then Sandoz decided to get out of that business. Back then if you wanted LSD for your research, you picked up the phone and called Rudi Bircher at Sandoz and say "Rudi I need 100 ampoules of LSD". He'd send you them or whatever else you wanted if Sandoz produced it. When they got out of the business, you could still get what you needed from the Government but it meant a lot of paperwork and it wasn't worth it. So I scratched that whole line of research.

Another research area was anxiety paradigms in animals. I had come up with three different paradigms - one was conditioned suppression, another was conditioned avoidance and the third was a conflict paradigm. Each had a built in control for motor effects. The three classes of drugs at the time were the tranquillizers, reserpine, the phenothiazines and meprobamate and each of these worked in one paradigm and not the others. I never really trained with a neurophysiologist or a biochemist - I just picked up enough to be dangerous. Actually we probably did one of the very first brain biochemistry behaviour studies. We used two different breeds of rats, which under normal conditions couldn't be told apart but when you shocked them one became hyperactive but the other didn't. So we did the brain assays on these two species and showed nice differences. I made a decision at the time that that's the wave of the future but I didn't want to be a biochemist. So when I moved from Pittsburgh to Vanderbildt, I took Bob Barrett with me as a post-doc, who was also a behaviorist who does lots of sophisticated brain-behavior studies and when I left the lab I gave it to him and he has done awfully well.

When I took over the clinical service in the Nashville VA, my agreement was that I hired clinicians to do the clinical work and I could oversee them if need be but I never hired anybody who wasn't better at something than I am. I hired really good clinicians and they did it very well and that was fine. I worked in the lab meanwhile and went to the hospital once a week. Then the Chief of Staff, the head professional person in the hospital, left and we had a new Chief of Staff, who got into an argument with the Chief of Psychiatry in the VA Hospital. The Chief of Psychiatry made the fatal mistake of telling veterans and their families that the Vanderbilt psychiatrists were in the VA hospital to do research and to train residents and

because the VA was a steady source of funding. Not one word about taking care of sick folk. Stupid. The Chief of Staff heard this and told him he had to change his way. The Chief of Psychiatry said no and so the Chief of Staff called the Chairman of Psychiatry, Mark Hollander, an analyst, and he said Mark send us another Chief Psychiatrist. Mark said no - no one tells me how to run my department. The Chief of Staff said if you don't give me somebody else I'm going to fire the current Chief. Mark says nobody fires my people - I'm going to pull all of psychiatry out of the VA - and he did. Amazingly the Dean of the Medical School didn't pick up the phone and tell Mark you can't disaffiliate because the affiliation is not with you, it's with the Medical School - I'm the one who makes decisions. But he didn't do that, so as a result here's an affiliated VA Hospital in which psychiatry has pulled out. Walt Gobbel, the Chief of Staff, picked up the phone, called me and said "Oakley I need to talk to you. You're the senior mental health person here, you've got to make it work".

So I put together the first, the only, mental health and behavioural sciences unit in the VA system in the United States. At first it was headed by a psychiatrist because they felt that was the only way it would be acceptable but finally the psychiatrist said "Walt, Oakley's running the unit lets make him chief". That didn't sit too well with a lot of people because psychiatrists are supposed to run things not psychologists. It was interesting because the Joint Commission on Accreditation of Hospitals came and they'd meet the Chief of Mental Health and realise that I was a psychologist and say well there is no way we can accredit you. But every time when they walked out after 2 or 3 days evaluating the program and said its the best unit we've ever seen and they gave us full accreditation every time. It was one of the best units in the whole country and the reason for that was because everybody knew it was a unique situation All the psychologists worked like hell, and so did the clinical nurse specialists, the social workers and the attendants. It was a happy family really.

When I hired staff, I told them look we are going to hire psychiatrists and they won't know as much as you do but they are going to make a lot more money than you do and the reason for that is because they are MDs. If that's going to bother you, don't come. Now the reason we did that was because the no top psychiatrist would want to come and work in that situation and be alienated from the department of psychiatry at Vanderbilt. We had a bunch of FMGs who had finished their residency in psychiatry, who were good but they weren't main stream. They were just really on their way to some type of a private practice.

When we ran the mental hygiene program, everyone had to take call. Because I lived 29 miles out of Nashville, I would take call Friday night and sleep in my office. We finally worked out with the Chief of Medicine that when somebody came in to the Emergency Room, medical residents would screen them no matter what the psychiatric problem was. If they thought the patient was medically okay, we'd assume responsibility. I did not want non-physicians to see somebody, do a psychiatric evaluation then find out he's got some basic medical problems that nobody had looked at. There was a lot of hemming and hawing in the beginning but it worked very well.

One of the reasons why the arrangement worked was because Tennessee, like some rural states in the United States, had a rule that a licensed clinical psychologist can commit somebody if you can't locate a psychiatrist. This was really made for the

rural area where there is nobody around. We just translated it to say look we can't get a psychiatrist because, even though they are across the street at Vanderbilt, they aren't about to come over here and evaluate this individual. So I decide I'm going to commit you and we're going to send you off to Murfeesboro VA Hospital. When the individual arrived there, the MOD would usually say "they sent you down here on commitment papers and if I commit you then you're going to be here in the hospital for a significant period of time because in order for you to get out of the hospital we have to go before a judge and show him it's okay to release you. But if you come into hospital voluntarily, I won't have to commit you and that will make it much easier for us to release you when we think you are ready. And 999 times out of a 1000 the individual would agree. But I signed many commitment papers and sent them off - it was just one of those situations.

You also have to go back and see how the world was in the early 1970s here in the States. We had people who would drop kids who were high on drugs off at an ER and you would sometimes have a technician in the ER who would then call the police and turn the person in. I was teaching a drugs course at Vanderbilt with 200-300 students and one of the things I would say throughout the semester was look if you have any problems at all with drugs call me day or night - you've got my home number in the syllabus. In the early 70s I would get maybe 4,5,6 calls in a semester but I haven't had a call now in 4 years. People who are doing drugs are smarter about drug use and if they have problems they aren't afraid to go to the ER or clinics.

Running the mental health unit became my life in the late 70s and that's when I left the lab. I essentially left research then and have done only a few minor things since then. I have put more time into writing and conceptualising. Another one of my characteristics is I'm a dilettante. I will never be the world's authority on anything because I never want to know everything about one thing - I don't have that kind of personality.

I go back to an old Kurt Koffka phrase "multa, non multum". much not many. If you know two things and how they relate that's better than if you know 20 things that are just separate facts. Call it wisdom if you want. Trying to get people to put things together rather than just pile up facts. This is one of the reasons why I have never once regretted not continuing research. I was turning out good blocks in the wall of science, I had a big lab and so much money I turned back grants down in Nashville because I couldn't spend it. The lab could have turned out a publishable study a month. Would any of them have been key stones or giant leaps forward - probably not. That's not good or bad - most people don't turn out key stones. A few do and those are the people that we need to support and foster.

On that point you around this time brought out your book Drugs, Society and Human Behavior which went into hundreds of thousands of copies. What was the philosophy behind it.

A simple thing. You've got to remember where the world was in 1970. Everyone was doing drugs. Being one of the few people who knew about drugs, and a psychologist who could put two or three words together, I did a lot of talking and travelling in the 60s. I gave a workshop for psychologists at the American Psychological Association meeting in Miami - a one day workshop on everything you needed to know about drugs. At lunch time Dick Davis, an Editor for Mosby, grabbed me and said that's

really interesting stuff, why don't you put it into a book? I think the world is ready for a book on Society, Drugs and Psychopharmacology. I said piece of cake - I'll turn it out in no time at all. A bad mistake. From the time I decided to do it, I literally did nothing else. I was still in the lab and I had people scurrying off to the libraries to get me stuff. When I went home I would write until about midnight before getting up at six for work. All day Saturday, all day Sunday - the only time that I took off was Christmas day.

I got caught up in trying to make it a good book and to do this I got taken up by the history and other things that a lot of other people might have learned when they were first year medical or graduate students but it was brand new to me because I didn't have that kind of a background. What I did was try to put together an honest rational book that integrated science, history and society. I turned it out in nine months. Its in its seventh edition. It took off because it was a book that John Doe, psychologist, could pick up and teach from. It was his course all laid out - from the introductions to drugs and society and the nervous system etc. Another reason was the fact that it was neither pro nor con on drug use - when the Government did stupid things I would say "even my mother would laugh at that ". I can go back now and read things that I wrote in the first edition and I'm still saying the same stuff today. It hasn't changed because the Government are still doing the same stupid things and the rational position, and proposals in the final chapter in the 1972 edition is still a rational position in 1997 when it comes to drugs.

Because of the book I started travelling a lot around the country, talking on drug education and drug programs. A fellow came through and met me in my lab in Nashville and wondered if I might be interested in a job in Washington in SAODAP, the Special Action Office on Drug Abuse Prevention as the head of education. I didn't know but it was exciting enough to look at it. That was the first time I met Jerry Jaffe, who was the Drug Czar for President Nixon. At that time Jaffe went back and forth to Vietnam many times and when he went there they treated him like he was a 4 Star General. When he said something Nixon listened and you pay attention to people like that if you're in the military. Anyway we met and Jerry talked about what they were trying to do then, which was to cut down on inner-city drug use which means black heroin use. They were going to try to do that with many approaches including foot prints so that they could make sure that you don't come to get your Methadone from me and then go over there and get it from another guy etc. Well it became clear to me that they weren't primarily interested in educational programmes. It also became very clear to Jerry, I'm sure, that I was not the kind of person who was going to do for them what they needed to have done. So in five minutes we knew that we were not made for each other.

One of the reasons why I have never been well loved in Washington is that my solutions are realistic long-term not political solutions. You can do all the interdiction you want but you aren't going to keep drugs out. A lot of people say that but I go a step further - if you really want to have an impact on drug use then you need to start in the home. Nobody wants to hear that because in this country you don't go fiddling with peoples' homes and their families, although we're switching a little bit now.

Anyway the book took off and I was having a fine time keeping up with everything and then in 86 I had a bout of lymphoma and the publisher picked a co-author for

me. I send him things and he drafts the first version and we kick it around. Its not as much of a fun book for me now even to teach from but that's because students have changed too. Students don't want the history unless it's really cutesy history.

Why?
Its too complicated to explain fully here but beginning about 1971 I started giving a talk to freshmen in my introductory psychology course - a classroom of about 480. It got to be enough of a classic that it became one of the essentials of the overall freshmen orientation. I ended up titling it "Welcome to Vanderbilt - Try the Salad Bar". The idea was take a splattering of everything, don't just zero in on your major subject. Back in mid-70s, students in the United States had as one of their major reasons for going to college developing a philosophy of life. By the time I stopped giving that lecture in the early 90s - by mutual agreement - I was unhappy with the way the students were receiving it and they were unhappy with what I would say. They had changed. Originally most of them wanted to develop a philosophy of life and values and less were concerned about making a living. But it had switched by the early 90s. They weren't interested in history as a broad based liberal education. In the 1960s, I used to tell people that when I got tired of being a psychologist I was going to start a real career as a historian because that's where the answers to many social problems are. Many of the things that I would talk about in class were in the earlier editions of the book but they aren't in there any more. The world doesn't care about that kind of thing and the students certainly don't. They just want you to tell them what they need to know to pass the exam. The book is much better now but I'm less happy with it. The book has kept up with the world and I haven't but that's the way it goes. I'm in the process of updating a whole bunch of things and trying to branch out because there are not too many people who are talking good sense about drug use in today's world I think.

What are they saying and what ought they be saying.
Well what they ought to be saying is that in fact drug use is always going to be with us and what you need to do is not just engage in harm reduction or interdiction but to see what some of the causes are. When I got into drug abuse prevention they would design programs to educate people about drugs and what they would find is that in fact drug use increased after a drug education program in the schools. Why ? If I tell you the dangers of mainlining heroin then I'm also telling you how you can use heroin more safely and so safe drug use goes up. I used to tell PTAs and state groups all over the country - do you realise that if you put in a drug education programme what you may very well get is an increase in drug use. What you're not going to do is change values very much. But they always said lets put the program in. That's because parents don't want to talk about things like sex and drugs to their kids - the kids know more than they do and its embarrassing. What the parents wanted to do was absolve themselves of having to deal with any of that but I think we need to appreciate the fact that there's a role for the home, for the schools and for the community as well as for the Government in drug abuse prevention.

I used to give a talk called 'Vanderbilt as Midwife' on Parents Weekend. The basic thesis was that Vanderbilt is not a miracle worker. If you send us your child and he's a klutz, we'll educate him and he'll be an educated klutz. We're not going to unklutz him. Parents don't like to hear that too much but it's true and this is why by the time a child is six you can make some pretty good predictions about whether they are going

to use drugs inappropriately and so on. I tell my students the best drug education program never even mentions drugs. What it does is gives people a reason not to do drugs. We know what is not effective. It's not things like DARE, drug abuse resistance education. Herb Kleber told me at a meeting we were at in September 96 that the DARE program specifically doesn't work with middle class kids. It may work better, but not very well, with lower class kids but that's because it's uniformed policemen who are doing the whole thing.

I think the President and the people in Washington don't want to bite the bullet. The bullet is you've got to bite is to tell parents this is what has to be done, and if you're not going to do it then we'll do it for you. One of the things Lyndon Johnson did back in the 1960s, which has now fallen by the way side, is he took middle class mothers and sent them into the inner city to teach inner city mothers how to be mothers. In this country everyone wants to talk black/white but that's not the problem; the problem is socio-economic class and the attitudes that go along with that. But we are so hung up on the black white thing that people don't pay attention to the data. A study came out recently in Atlanta where the pre-school children of welfare mothers were shown to be already one to two years behind their peers - these are 3 - 5 years old so that's a big lag. Well you know what's going to happen if you come in to school and you're not ready - you're always behind, the teacher doesn't like you because you're a chore, the other kids wonder why you're dumb and you never catch up. If you want to train people to be drop outs that's exactly the way you do it. The family is sancrosanct in the United States. It looks even as though OJ will probably get custody of his kids because we have this unbelievable idea that blood is thicker than water and so if he wants his kids he should get them.

There seems to be something peculiar about social attitudes to drug use. It's almost like VD - a hidden dirty area... What's involved why do we react this way?

It's interesting why do we identify drug users as different and why we think we can treat it differently than teenage mothers, or delinquents. I think the reason is that people believe more so with drug use than anything else that you made a conscious decision to become a bad person and use drugs and you have to live with the consequences. Another aspect is that you would not have made that decision if we'd kept the drugs away from you and this is why the focus is on the supply side rather than on the demand side. We are going to cut off the supply and that will solve the drug problem, and of course it never will. How do you change attitudes? I try to change attitudes in part by talking facts but I always tell people that information never changed behaviour except when the information is within a value context.

Values determine the limits within which information can be used in order to select what we think is the best of all options for our personal selves. This is why if I tell you at 16 that if you smoke cigarettes its going to kill you it doesn't mean a damn thing. Any statement at that age that has to do with anything beyond the age of 25 has no meaning. You need to plug information into some value system that you have and this is why it makes a lot more sense to talk about the effect cigarette smoking is going to have on your relationship with that girl or guy. As in the movie The Thing That You Do - that Tom Hanks directed. It speaks just to this. At the very end the hero says to the heroine when was the last time you were really kissed well. Now I haven't thought about kissing somebody well from the time I was 16 but that's

the thing that vibrates and she can immediately say the last time she was kissed well was 4 years before. So they kissed and it was obviously a good kiss and that's why you're not going to smoke because she doesn't smoke and if you really want to kiss her well she's not going to kiss somebody who tastes of tobacco and tars. So the value system is the important thing. My argument always is you've got to give people a reason not to do drugs. I got onto that back in the 70s after a study they did down in Mississippi on alcohol abusers. They were asked why did you drink so much and the answer was "why not?". There was no reason not to get drunk

Lets come back to Nashville and your running the mental health service. That has to have caused considerable amount of paranoia among the brethren.
Oh yes, a lot of paranoia. It was interesting. I don't think its quite as bad in Europe between PhD's and MD's as it is in this country. Here its really bad. I remember the Chief of Medicine in the Nashville VA, Roger Duprez, came over to see me in my lab once and we talked research and it became very clear to me that the reason why I was acceptable to him was because my research credentials were every bit as good as his and the people whom he respected. If I hadn't had that I would have been nothing, even though I was Chief of the Psychology Services.

I hired the very first PharmD in the VA system. You talk about paranoia. All the service Chiefs for Medicine and Surgery were sitting around and I said "I'm going to hire a PharmD". They said "you're going to do what? What's a PharmD going to do?". I said "he's going to write prescriptions". "Is he a doctor?" "Yes". "Is he an MD?" "No". Of course what happens is they run him on a protocol and a 'real' doctor signs off and says okay no problem once he feels comfortable and the PharmD goes on and does his thing. Now there are many PharmD's in the VA system and in the world, the place couldn't function without them. But I hired the very first one and he's still there, Dave Shepherd. He's superb and everybody loves him but not only did the VA staff worry about him, the Nashville Association of Physicians sent Alan Bass to talk to me and I can still hear him "Oakley, what is it you're going to do with this PharmD?". But we did everything right.

I survived in that situation by doing what I did well. I never once told a physician how to treat somebody. I never once suggested why not use this drug rather than that one. You're the MD so whatever you say, that's it. If I think you're doing really bad work then I'll put you in a situation where you can't screw too many things up. It's one of the reasons why I've survived in ACNP. I keep my hands off the things that I think the secretary should not be involved in. I've got the nominating process set up now so that if you were to become chairman of the nominating committee I hand you about 12 pages and I say here's the procedure and I'm out of it. In this kind of position too many people would say "Oakley's a king-maker". I don't even vote in the ACNP election. I don't touch the damn thing because I don't think anybody should. I set up procedures in just that way for anything I can, so if I get run over by a trailer truck ACNP could go without a secretary for 2 years.

This leads onto the issue of prescribing rights for psychologists. **Can I take you through the history of this. Where did the issue come from?**
This started up as a move by Pat DeLeon who was in Senator Inouye's office - he was his legislative aide. He's an important gun in the American Psychological Association. He started to push prescribing privileges for psychologists in the late

80s and so they set up a Blue Ribbon Panel which included people from both APA's and the Government. About the same time Dick Shader who had been involved in that said we need to put together a statement from the ACNP. That was the first move but I hit the idea of calling them Council Consensus Statements - it's not a statement by the ACNP because we don't vote on it and could never get an acceptable statement from the diverse ACNP members, but it is something that Council has discussed widely and agreed to so it's a Council Consensus Statement. We publish them in the journal. We have probably four or five of them now - there's one on Clozaril and things like that.

In the Council Consensus Statement on non-physicians prescribing, the basic idea was that the ACNP has no problem at all with anybody prescribing medications providing they have the appropriate background and training. Well since we had that statement out there and the Department of Defence was moving ahead with setting up a program, they decided one of the things that they had to do was get somebody to evaluate it. Well you can't have the American Psychological or the American Psychiatric. The one group that would have some kind of credibility to all groups was ACNP. We know about drugs and we've got psychiatrists and psychologists. Dave Engelhart and I wrote a proposal which was approved by the ACNP Council to evaluate the DoD program. It was accepted by the DoD and it's been continued ever since. We had three board certified psychiatrists and three licensed clinical psychologists doing the evaluation visits and we've done marvellous things for the rigor of the program. One of the things that's happened is that some of the psychologists who were for the program in the beginning are now against it, and some of the psychiatrists who were against it are now for it.

Let me come back to my own personal feeling about medical training. Give me a bright high school graduate well motivated for one year and they can handle about 90% of the stuff that walks through the GPs door. So why do they need 4 years of college and 4 years of medical school and 3 years of residency - it's that other 10%. Much of the stuff is pretty Mickey Mouse and as a matter of fact, most of what comes to a first level physician doesn't even have something physically wrong with them - 17% may have something physically wrong with them. So that's where I come from.

Now on this program, sometimes the supervision was as casual 'I'm a prescribing psychologist and you're my supervisory psychiatrist and I pass you in the hall and say I saw this guy and I did this and you say fine that sounds pretty reasonable and maybe we sit down once every week or two'. Or it can be somebody who is just sitting there all the time saying you didn't dot the i or this and that. Now the last report that I wrote, after we evaluated these graduates, which all of the committee agreed with was that none of us were ready to say these guys, who had really good training, were ready to go out and be independent practitioners in the real world. We stated it that way even though within a military setting they could probably be independent practitioners - because who do you deal with, you deal with 18, 19, 20, 30 year olds who are basically healthy people and almost anybody could handle that. Indeed one of the problems we are having is that they don't see a broad enough spectrum of problems.

The problem is they might miss some of the medical problems. Now I know psychiatrists are going to miss a medical problem. The DoD fellows are doing

physicals maybe two a week..... how many of the psychiatrists here have done a physical recently and if they have how good were they? But all of this gets caught up in the whole bit as to what's good medicine, what's legally safe and all these things go back and forth. If you screw up, no problem, you're an MD and you had an error in judgement - they're not going to hang you for it. If a practising prescribing psychologist screws up there is no precedent for it - who would want to write the insurance for that? Things are changing in this country and I'm hoping that none of the programs that are out there now get developed because they are not nearly as rigorous as the one that we have help shape in the DOD.

Another interesting thing is we have one fellow now who is in the program who is a PsyD. Four years of college, three years to get his PsyD. His last science course was first year college Biology and before that he had a general science course in high school. That's all he had. He went and he took these rigorous first year medical school classes and did well in Biochemistry etc. So one of the things that I have become convinced about, which a lot of people have a suspicion about, is that these things we put up are hurdles. We just want to make sure that if you're good enough to get through biochemistry, then that means you are conscientious enough and maybe you'll make a good physician. Its not quite that open and shut but you don't need all this science background in order to get through the classes in medical school. Would I send these prescribing psychologists out into the community - no I wouldn't even though many of the psychiatrists who train them say "hey I would send my mother to them that's how much I trust them".

You're also interested in the area of neuroendocrinology.
Yes, I'm really interested in what I call psychoendoneuroimmunology - PENI-ology to make it easy. I've got a book written on it which I'm trying to get published. What I'm interested in are things like the impact of thoughts on these systems. We learned about these systems separately and way back they didn't supposedly talk to each other but then we began to realise they interact with each other. We are beginning to appreciate that all three systems turn out messengers and they can all talk back and forth.

Now I'm not a philosopher but for as many years as I have been teaching I have been asking what is the mind, what are thoughts ? - they're actions in the brain. What are actions in the brain - it's got to be neurotransmitters and so why should it surprise you that if you think certain kinds of thoughts its going to change your biochemistry. That shouldn't surprise anybody. Why wouldn't you expect that? One of the things I'm interested in now is the extent to which individuals have a will to live. There are good data out there that talk about people delaying or speeding up the time at which they die just by their belief systems. That's an important thing for people to know. Another one of them is you're only as old as you think you are. One of the things that amazes physicians even is the fact that an independent predictor of when a person's going to die is just to ask the person a simple sloppy question "for your age how do you feel". That's a pretty good independent predictor.

I got into this whole thing way back in the 60s when I heard Tom Holmes talk on Critical Life Events and he just blew me away. I had him come and talk in Pennsylvania and Nashville. In Nashville, Roger Duprez the Chief of Medicine and his people were there and he categorically rejected it - that's not possible, its a

different realm. It's these kinds of attitudes that we need to change. I think the pharmaceutical companies are finally now beginning to jump on it realising that there are other things out there that influence behaviour and mood than the nervous system. One of the big things is the endocrine system and in time we're going to begin to realise that the immune system also has some impact. As everybody says since Selye, one of the things that happens when people get sick is they don't feel good. We're getting to the point where we're going to understand what it is that the immune system does to the nervous system and to the endocrine system that makes us not feel good. Why can't you be sick, fight infection, and still feel good?

We are also going to have compounds that will slow down ageing. What is ageing? We can agree that it's probably a biochemical process and if it's a biochemical process then we can find out which knobs and whistles you adjust and you're going to be able to slow it down or stop it which would be interesting. We've got to think about this. Suppose you could put something in the water and just stop everybody from ageing right now - you may think that would be great but suppose you have a 4 year old child, do you want to have a 4 year old child running around your house for the rest of eternity - probably not. Or suppose we have something that will only stop the ageing process for 20 years when do you want it to happen - when you're 20 years old in the physical prime of your life or would you rather it be 40 or 60 ? If somebody wants to live to be 100 today and they're under the age of 30 we know what they've got to do to make that very probable. Whether or not you want to live that way is another issue.

I think nootopics are on their way but then there's all kinds of problems about how you handle it. We've had smart drugs for a long time - we used to do things with smart rats and dumb rats. Everybody always had the idea that if you give them all a smart drug, then all animals would improve their learning but that's not what happens. What happens is the dumb rats become as smart as the smart rats. Now in the United States the one legal basis on which you can discriminate against people is intelligence. Because you're bright, we're going to send you to medical school and you get an opportunity for a much more affluent life than being a garbage truck driver. Well suppose everyone is equally bright, how do we pick who gets those chances? The Womens revolution, the Black revolution are going to be nothing compared to the Intelligence revolution.

What about your role in ACNP

As regards ACNP, the tradition has been that you serve as Secretary and go on to be President. They've stopped asking me if I want to be nominated for President because I can't think of a worse job for me. I'm more interested in the nuts and bolts and developing projects. I would have been a great Chief of Staff for a General or a President because I like making things happen. If somebody says we'll sit and think about great thoughts I can probably do that as well as most people but President of the ACNP is not a place to think great thoughts. This is one of the things we're going to talk about tomorrow - should the ACNP President be for more than one year. I think we will reject it out of hand because if we are going to run two people and we are not going to pick them for the honour then you have to select them for a reason. That means you need to have a platform and know what the ACNP should be doing over the next two yeas if you are elected. I think it would destroy ACNP - we're not that kind of organisation.

Back about 1980 Don Kline became president and he said I think we need to be involved in Washington. So we went and got ourselves a Washington lawyer and we started going and visiting the Hill and did all of those things. Maybe that was good or maybe it wasn't - with most politicking and lobbying it's never a yes or no clean thing. Tom Detre came along in 94 and said I don't think there is any point in this. Now the world had changed and you know great men have a way of saying things that fit in with the zeitgeist which is what makes them great I guess. So we got rid or our Washington lawyer and we never visited the Hill anymore. We also tried, without great success so far, to get a grass-roots movement going.

I dearly love to run meetings. I didn't always love to run meetings. When I was a researcher I thought research was the best thing in the world to do, the most productive but then the world shifted and I could no longer be a researcher. Then I moved into administering research and making it possible for other people to do good things. I remember a meeting in Florence with a whole bunch of people from pharmaceutical industry when I was trying to solicit funds for the Washington CINP Meeting. I said you have to appreciate what everybody does and I see our job as meeting organisers and your job as funding congresses as facilitating the communication between the people who are out there slogging in the trenches doing the good work. If they just do all this work and they don't interact with each other it's a waste of energy and so what we do is every bit of important.

We're about to move into an explosion of electronic publishing. At ACNP we are in the process of re-doing all of our contracts with the Journal people and the Fourth Generation of Neuropsychopharmacology publishers. We want to control all of the intellectual content and be able to do with it what we want. Can you imagine if we could take the Fourth Generation and put it on-line? We've got to figure out how to finance it. That is what everyone is concerned about. But if you put it on line, everybody all over the world is going to have immediate access to the very best information. What's more if you've written a chapter on SSRIs and there's a new finding you can change paragraph 3 instantly. Material can be continually updated - we are talking about updating on at least a quarterly basis. We already have an ACNP web site, as well as CD-ROM's for both the Journal and Fourth Generation. This organisation has people who are unbelievably brilliant like Stan Watson or Floyd Bloom to point the directions. I make things happen, I'm a doer.

In recent years one hears that ACNP is the most professional psychopharmacology association and puts on one of the best scientific meetings in the world. However, one hears from Tom Ban and others that Arthur Koestler was a guest at one of the earlier meetings and commented on the apparent shambles. Does this transformation coincide with your arrival on the scene?

I would be ecstatic if someone could show that I was responsible for ACNP being what it it - I agree with your comments about what it is. But I have no delusions, I was in the right place at the right time and I have helped to shape the College. But you have to remember several very important facts. First the membership consists of the very best brain-behaviour-drug researchers in the world and membership has always been very competitive. In the beginning it was limited to 180 Members and Fellows, not counting Life Fellows and Past-Presidents, and it was almost true that

someone had to die before new people could become members. Currently we take about 30 new scientific Members per year and the bottom line for the membership committee continues to be research excellence, creativity and productivity.

The second fact is that the ACNP meeting is closed - non-members can come by invitation only. This has two effects - it keeps the meeting small and thus you have opportunities to really talk to other scientists. Second if you get on the program, you know that the best in the field will be in the audience and so people save their best data for the ACNP meeting.

Each year we elect a new president. Between being president elect, president and past-president for two years, this gives that person an opportunity to accomplish certain objectives and they use the Secretariat for this. But elections for Council and officers are based on scientific stature and personality - there are no statements about plans or agendas and no campaigns before the election. The Secretariat is now organized to take over all the mundane things to do with membership selection and program development, leaving the members free to focus on what they do best, which is pick the best of the nominees for membership or the best symposia for the program. Finally we have had excellent support from the pharmaceutical industry. As the program has gotten better the pharmaceutical companies want to support it and that makes the program even better but the organization is non-commercial and we don't have exhibits, or sponsored programs and the Secretariat works hard to be industry-neutral.

Unlike the secretary for CINP or BAP, you've been the secretary for ACNP since the early 80s. I'm sure it's made for stability having one person like you there but all the organisations seem to be facing change - ACNP at the moment seems reasonably stable but you threw off the ASCP there recently[1].
That was because I think the ACNP was not responsive. I have tried for a long time without success to get council to do the kinds of things that ASCP is doing but they weren't interested. Now they're starting to do it by having regional meetings, spreading the word out to the "heathen" out there rather than just talking among ourselves which is what the annual meeting is.Tom Detre a few years back talked about ACNP as a one time a year organisation but now we're moving toward a year round organisation with regional meetings and a bunch of other things that will keep us busy year round interacting with and educating people. Our honorific President system means that people come and go and this has some obvious disadvantages

I'm not sure what will happen down the road but with the people we've had recently we've been able to upgrade our whole computer systems and move into the electronic era. Most people see the strong point of ACNP now as the annual meeting. You hear all the time that its the best meeting in the world and it probably is for the kinds of things that we're after. I'd like to push people to support our extension into an annual update on the CD ROM and into the World Wide Web because what we are really good at is creating and communicating information. If we can do this I think we'll do well.

[1]see Klein D (1996). The Psychopharmacologists, Vol 1

As regards CINP, it's been pushed by ECNP. Remember when the ECNP started not too long ago it was going to fill in the gaps every other year and then they were making so much money they decided they might as well do it every year and now they have so much money it's obscene. One of the things that I have talked to Lew Judd and Claude de Montigny and others about is finding a new niche for the CINP. The ECNP has taken over Europe and it's expanding and getting more people in from Asia and they offer a good meeting. If they can just keep it from being swallowed up by pharmaceutical companies then...

Do you think this is a problem?
Well if you look at the kinds of things that the ACNP does - you see ACNP Mead-Johnson travel grants etc and the names of different companies supporting teaching day and other activities. But its upfront and we really want to be independent. I don't know what it really means to be in the pocket of the pharmaceutical industry at the level at which I think ECNP is. Does that mean that if I go in as a scientist or a clinician and I listen to the presentation it might be biased? Well that's one of the things it means and I think in some instances it certainly is. I believe that one of the problems that a person has in an ECNP meeting is that they don't have the kind of safeguards that we have here. If you come and give a talk at the ACNP and you're going to talk on some product, I'm going to find out if you've ever gotten any money from them because of requirements for disclosure. ECNP doesn't have that and I think that's a problem.

I think the same thing is true with the CINP to a lesser degree. But that's an expensive organisation - the Congresses are expensive to run. The Glasgow Congress has an industry panel, I hear, and everybody sits around the table and knows what Mr Lilly has given and what SKB has given and what they are getting. The whole thing I hear is very above board. Generally we're moving toward more disclosure. But I don't know what the CINP can do that the ECNP doesn't do. As Alec Coppen once said, and I think it's true, you have to appreciate that these meetings are not just for information exchange, they're for culturally broadening scientists - letting them see another part of the world. Maybe the CINP will reach a point where it should never go to Europe and have a meeting there. But its 1998, 2000 and 2004 Congresses are there. Like every other organisation, except the ACNP, up to now it's been a good old boys organisation - if you're in, you're in and if you're not you aren't. I think they may try to get the bylaws changed before the next election so that it will be competitive. It gets very difficult for an international organisation because on Council you've got to have somebody from here and somebody from there - on a popular vote you might get the Americans voting as a block and we have more members than all the other countries.

But these international organisations are fun. CINP, the World Federation and WPA are all different but they all tangle with the same problem - how do you deal with all the different loyalties that cut across continents and countries and still provide good science. I guess they at least deliver enough entertainment, enough culture to satisfy the people who say they were coming for science. The nice thing about the ACNP is that all you really have to worry about the science and the people who come here have all been everywhere anyway. There are a lot of stars here like our current president, Charlie Nemeroff, and if you're a rising star you don't continue to rise if you hide your light under a bushel. Like the old song says when you're hot

you're hot and you've got to take advantage of it. So I push him to jump into every game he can. Back in the early 80s and the late 70s Fridolin Sulser was hot and he was complaining to me once about how he had to travel so much - I said Fridolin if it bothers you so much to travel just say no. He said "Oakley if you say no once, they may not ask you again".

Can we chase your interest in the history of psychopharmacology.
I got interested in the history of the ACNP about three years ago . I started the procedure of video-taping all of our big names because I realised that people were getting old - the people who were in at the beginning. I wanted to start taping them to get it down... and some of them I think we need to tape again and again. I've also had the idea, beginning with this meeting, to try to tape people at the height of their career as well as when they get to be 60 or 70. I'm going to do it by trying to get tapes on all Council members and officers as they come on Council - Danny Weinberger for instance now and again in 30 years time.

I got involved in the CINP history book because Tom Ban has been doing this kind of thing and he needed someone to help him make it happen. I did it at my own expense since there were no CINP funds. We had lots of fun meeting and going over it all and I was up in Toronto to meet with Tom and Frank Berger and Heinz Lehmann and Ned Shorter, the University if Toronto historian of psychiatry. Over lunch, I became convinced that we had to do more to salvage everything for an archive. Even what may seem silly material and old stories. Heinz was saying the reason ACNP started to meet in Puerto Rico way back in the beginning was because it was cold as hell in Washington and Eastern Airlines had a special that made it so cheap to come that they couldn't not come. That started the whole tradition of having the meetings in Puerto Rico.

I think people like Frank Ayd need to be interviewed at length. He is probably the most under-rated person in the whole field. He was involved from the beginning of the CINP as well as the ACNP and on top of that you know he must be one of the world's best Catholics. He was very much involved in the Vatican and he was was able to get the Vatican Pontifical Council to sign on with the Decade of the Brain. He talks about stories with his kids at the Second Vatican Council back in 62 or whatever and the priest next to their room in the Vatican didn't like cats and so his kids would go out and bring in cats off the street and put them in his room. He raised hell about it - of course he's the current Pope. That's the kind of thing that gives flesh to the skeleton of the history. To hear Frank Berger talk about how he got out of Czechoslovakia - I think the Germans came in one day and he left the next day taking only his camera with him. When Heinz Lehmann got his degree in Berlin the people said we will send your degree once you go to North American and get a job - when you have a job then we'll send you your degree. I'm afraid all of that's going to be lost if we don't just tape everything.

I was talking last night to Len Cook. I said Len you've got to send all your stuff to the archives. He said "well I'll go through it". I said "don't go through it. Everybody wants to go through it but I don't want you to go through it - just send everything. How do you know what historians are going to think is important". So he says he has all the original correspondence back from when he was with SKF back in the early 50s. He's saved all of this stuff - he's a pack-rat. He said "I've wanted to throw

it out many times and then said well I'll wait". I said "don't throw it out I want you to send it in". I talked to Joel Elkes but he's got rid of it here and there. That's what I'm worried about. Everybody does it - you purge. But I think an awful lot of history is going to come out from the comments you get back when you send an article into Neuropsychopharmacology, when the editor writes back and says "David, this is ridiculous.. " - that correspondence I think is going to be important. How do people see this particular topic and this finding. How about pink sheets on your grants - that's the kind of stuff that I think is important and I think needs to be salvaged before it gets lost forever.

So at this meeting, the history task force is going to meet and I'm sure decide to do a history of the ACNP. That will make a major contribution. I think we need to go back and ask for instance what was it like two years before Morruzzi and Magoun wrote The Waking Brain. Unfortunately I don't have any more the physiological psychology book that I had then but I still remember a CIBA symposium volume on behaviour and brain mechanisms - one of the early ones, probably in the late 50s. I remember Larry Stein got a copy and he and I kept stealing it back and forth because we only had one copy. That opened up a whole universe for us and others. I remember arguing in the early 60s with people on the pharmacology faculty at Pittsburgh about neurotransmitters - some of whom didn't even believe in neurotransmitters.

In Vanderbilt, the medical school decided they wanted an archive but they made a policy decision they only wanted in their archives material from world famous faculty and so they haven't sent out a general invitation. They didn't even send anything to Allan Bass who's an emeritus. When they finally needed his office, I was talking to Fridolin who was saying that he was helping Allan and Sarah his wife pick up all of his stuff and put it into boxes and take it home. I said what are they going to do with it and he said that Sarah said "probably throw it out". So I told him not to do that but to put it into the psychopharmacology archive. He started teaching in the late 1930s at Syracuse and he still has his original hand-written notes from then. Well I think that's important to see how somebody thought about the issues then.

We need to have as much as we can of everything and if we end up filling barn after barn so much the better because at some point somebody will wander through the barn and begin to pick out things. I think it's been a fascinating era and area to be in. I just wish that I had more time and energy and money to put into it but I've got so many irons in the fire. I will continue in this role as Secretary and history collector as long as ACNP will have me and I want them and can do the job. It's given me an opportunity to interact with people that I would never have interacted with having come out of a non-medical, non-physiological, non-biological tradition. I really think that the brain is the last frontier and that we are going to have more fun, particularly finding out how the brain and behaviour, the psyche, the endocrine system and the immune system mesh together.