

Ask-a-Biologist Vol 009 (Guests Pauline Davies and Robyn Williams)

**The Art and Science of Broadcast Journalism -**

It's about getting and telling a story. It's about excitement. It's about letting people know what is happening in the world in which they live. Science broadcasting is both an art and science. Listen to two long-time BBC and ABC broadcasting journalists, Pauline Davies and Robyn Williams as they talk about the interview process.

**Transcript**

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**Dr. Biology:** This is Ask-A-Biologist, a program about the living world and I'm Dr. Biology. Today we turn the tables a bit and talk with two internationally known science journalists. You'll get a chance to learn about science journalism and the interview process, along with tips that you can use to make your own radio show or podcast.

My two guests are Pauline Davies and Robyn Williams. Both Pauline and Robyn are science journalists and broadcasters.

Pauline has worked more than 12 years for the British Broadcasting Corporation. You've probably heard of it as the BBC. She's also worked as a journalist and producer for science programs for ABC, which in this case is the Australian Broadcasting Corporation.

She's won many awards and produced many shows. I believe my favorite is the award-winning 10-part series "Who'd Have Thought It?" Currently Pauline Davies is a professor of practice at the Hugh Downs School of Human Communication at Arizona State University.

My other guest is Robyn Williams, who is also a science journalist. He's been a presenter of several ABC radio programs, including the longest international running science radio program, called "The Science Show." That show's been running for more than 30 years.

Robyn, who is better known in the science world than the other Robin Williams that you may have heard about, has received many awards and honors including five honorary doctorates, and also being proclaimed as Australia's National Living Treasure. He is the author of 10 books and his soon-to-be-released eleventh book.

And now for something completely different, a title borrowed from one of Robyn Williams's books and the theme of this show, I'd like to welcome my guests Pauline Davies and Robyn Williams.

**Pauline Davies:** Hi.

**Robyn Williams:** Hi.

**Dr. Biology:** So to begin our discussion, since we're talking about recording, I believe the first thing we should talk about is telling a story.

**Pauline:** I think telling a story is the most important aspect of radio. In fact, when I have a project that I'm just starting on, I'm actually thinking visually. We made a program for The Telegraph, crossing Australia, and it was a dramatic scientific story, but all the time I was thinking visually. I was thinking about people tramping through swamps and running out of water in deserts and finding a tree that they thought would save their lives and just crawling to the tree and maybe dying at the tree.

So it's completely visual. And I based the whole story around the visuals that I see in my mind. Then you've got to find a way of describing it, and that's where words come into play.

**Dr. Biology:** The theatre of the mind, so to speak. The same thing for you, Robyn?

**Robyn:** In many ways, yes, because when I think of science, I think of people telling me information, huge loads of information. When you do it on the radio, even if you do it in conversation, this lump of information is too much. What you want to know is the real world where it came from: who did it, why they did it, why they cared.

So you're beginning to tell not just the story, which is the narrative part, adding the information part, which is the second thing, but also there's a question of doing descriptions. What's it like? What's the flower like? What's the animal like? What's it do?

And those three elements are what we do in radio when we're talking about science. In fact, what we're trying to do is get the scientist to become a human being again, as they normally are when they're talking about the stuff in the first place.

**Dr. Biology:** Absolutely. To make it clear, it's more or less good writing. Good storytelling is who, what, where, when, why, how.

**Pauline:** Yes. And you want people to be alive. You want them to have expression in their voices. You want them to be engaged, and you want them to be excited. And that excitement actually transmits itself to the listeners.

That's what it's all about and that's what we're always looking for when someone is doing a broadcast. Those are the bits we'll select to actually make it to the little radio program. The rubbish, the boring stuff in between, ends up on the cutting room floor.

**Robyn:** We tell them that, and they get slightly cross at that - well! We're going to filter what they say.

**Pauline:** But they're always pleased at the end result, because really, we're making them better than the original state.

**Dr. Biology:** Yes. It's very difficult to actually speak as clearly about a technical subject sometimes, and so that's where your role comes in. When you're producing these shows and you're thinking about telling a story, the other part of it is doing the research, getting your homework in. What's the process for that?

**Robyn:** I do research on the basis that I'm not a scientist. I didn't do science, except at university. I did a bit. My father was always telling me that he was more clever than I am, and it stuck. [laughs]

And so I decided to take a different tack and exploit my ignorance, exploit my failure. I make a virtue of the fact that I can't understand the sorts of things that Nobel Prize winning mathematicians or physicists talk about. I want to say, "Explain it to me because I'm only me. And I make an "only me" the kind of broadcasting specialty, if you ask.

I also ask what, where, or how. I also ask, what's the point? Why do you do this? I remember one of the first interviews I ever did a long time ago, and this is something of a frightening thing. The guy whose work you've been reading about in a text book. This happened to be Sir Hans Krebs, of the Krebs cycle. And this was a delightful short man from Oxford. He had a Nobel Prize.

I asked him about biochemistry, which is the basis for how we're alive. It couldn't have been more important. And he says, [in an accent] "Oh, my work is not very interesting. People won't understand it. It's stupid. I have nothing to say." And so I asked him about his growing up, about the way in old Germany under Hitler. He inspired himself through this science, the most wonderful, compelling story.

So what we've done is really asked, "OK, so this is a Nobel Prize winning piece of science, but what's the point? Who cares?" He told me.

**Dr. Biology:** That's excellent. Same thing with you, Pauline?

**Pauline:** Yes. Our styles are very different. Robyn has been broadcasting for, it must be forty years. He's got the most tremendous knowledge about just about every aspect of science, so he's never at a loss for words and he can make connections easily.

But that's Robyn. He's a very, very special person like that. And I always say to him, he's

a much better interviewer to me. He has got a very slick technique, and that's great, whereas I tend to do more research. So if I'm going to do an interview, I like to know what are the important aspects of the interview. That usually means me going onto the website and investigating.

So I'll look into people's work and then I'll write myself out a list of questions. I don't always stick to the format, I don't always stick to the questions, but I know what are the important things in the interview that I want to bring out. Then if somebody says it to me, all well and good. And if they don't, at least I know what to ask.

**Robyn:** Well, you know, between us, there is a secret: how to avoid knowing too much. Because if you really do read all the books and try to memorize all the stuff, you'll sit in front of the dear old man Sir Hans Krebs, and you'll do a five-minute, five-hour discussion going through all the bits of his stuff, and you'll really animate a lecture. You don't want to do that. What you want to do is get to the essence. In some ways, what I'm saying is, yes, do the research, but understand how much is enough.

**Dr. Biology:** That's a very good point. The other thing about using the Web for your source, one of the things I always want to caution students is you've got to look where the source is coming from, because there isn't necessarily an editor.

**Pauline:** That's absolutely right. And I'm always very, very careful. I look for sites with.edu, coming from a university where it would be a faculty member who would be producing peer-reviewed work. And then I double-check as well, because often they make mistakes and there might be something unclear and it's gone from one person to another and another. So you have to be careful, and do as much research as you can. Check two or three sources.

**Dr. Biology:** Let's switch just a little bit. Now we've done our research, we've thought about our story. The next thing is, we have to do the interview. And there are a few things that we can talk about, some of them as fundamental as holding a microphone. And we don't have to go into a lot of details, but some basics on that.

But there are other things, such as breathing, learning to breathe, and nervousness - not only for the person that's doing the interview, but the one conducting it. You must have great ideas on how to deal with those things.

**Robyn:** [laughs] Well, I come in being slightly shambolic. I look scruffy, I look like a clown, I'm not dressed in a suit. I often carry equipment that's just very, very old. And I make fun of the equipment. And that's really not simply something that is an indulgence on my part, using old stuff, but here is something to talk about, here is something to break the ice, here is something ordinary.

And when I had old reel-to-reel tapes, I used to, especially with kids, record them and

play it back. And we'd have fun with it. We'd play it twice the speed. We'd muck about with it, so that the whole thing was becoming informal.

And then, if I'm doing an interview with a scientist who's a bit nervous, having broken the ice a bit, I also gossip. I usually can think of someone who is their friend, and we talk about that friend in common. It's amazing. There's always one.

And then we sit next to each other, not opposite, face-to-face like you and are now. What I do is have it side-to-side so that you don't have to look in my face if you don't want to. And the microphone is under the chin, for two reasons. One of them is, if you say, "Pea!" you don't have this incredible "bang" which comes out on the recording, but also, the person isn't looking at the microphone.

It's under the chin. It's comfortable. It's away. And because you're shoulder-to-shoulder, side-by-side, you can be looking at something else if you choose, not just this face, so you've got this option for not being distracted. So that kind of body language, I think, is absolutely essential.

So it's informality, it's relaxation, it's jokes, and then you can always move it towards being more serious, more vital if you want to.

**Dr. Biology:** Very good.

**Pauline:** Yes, I agree with all of that, of course. But I think you've also got to approach people, and be friendly and nice, and build up a rapport with them right at the beginning, and then they're going to respond to you.

And always appreciate that the interviewee is likely to be nervous, and sometimes they get so nervous that they just clam up and they apologize, and they say, "Oh, I'm sorry! Oh, I've made a mistake about that!" And then you have to reassure them and say, "Everyone makes mistakes, doesn't matter, I'm just going to take this back and put it on a computer, and I'm going to edit it, and I'm going to take out all your mistakes, so don't worry about it." And I think that's so important.

**Dr. Biology:** I also do a fair amount of photography, and I've noticed, early on when you're doing a photo session, people are very nervous. I mean, if you just keep taking pictures, especially now, in the digital age, because you're just using electrons, not wasting a lot of film, they begin to relax.

And what happens is, it becomes no longer a camera pointing at them, it's just an object

there. And Robyn using the microphone under the chin, I think that's a marvelous way of jumping to that point where they don't have that right up in their face.

**Pauline:** Yes. I mean, not all microphones work in quite the same way, but the one that Robyn is choosing to use, that's how it works.

**Dr. Biology:** The antique.

**Pauline:** Yeah.

**Robyn:** The antique, yes.

[laughter]

**Pauline:** I must say something else. It doesn't affect Robyn so much, because male voices tend to work well on radio, but sometimes women, when they're anxious, their voice goes high. It's a high-pitched voice. And you can't actually hear that that's happening to yourself.

And then you have to relax, and you have to breathe deeply, and you've got to think in a lower register - move your voice consciously down. And it just sounds better. Sounds more relaxed on radio. Don't know I'm sounding now, at the moment.

**Robyn:** Well, you're sounding fine, but you see, what we need to do is to give you a joke - which I won't, actually, but if you can jump in - because sometimes when people are being interviewed, they find themselves in the middle of a long sentence, and they don't know how it's going to end, and it goes round and round and on and on, and you can see that their eyes are going round and round and on and on - you then pick up on a phrase, jump in with a joke, everything explodes, they laugh, their voice lowers, and they just finish with a line, and you've rescued them, in some ways, just by -

You know yourself, however, as a broadcaster, how that's going to be cut, edited, how it'll match - because if you just keep jumping in all over the place, that is a bad thing. It won't work.

**Dr. Biology:** Right. And so, in other words, don't talk over the voice of the other person you're interviewing, because it's going to be very difficult to cut that out. I think I learned that from a very good teacher.

**Robyn:** [laughs]

**Dr. Biology:** Let's do something else here, as far as the interviewing. The surroundings. There are a couple things I'd like to talk about. One is the types of rooms that you do it, and also the atmospheric sounds that you would have around you. And, Pauline, I think you probably could address that.

**Pauline:** Well, two things. If you want to get a good, clean recording, and you haven't got a home studio, and you've got some fairly basic equipment, I'd say always use your headphones. I think that's very important. And I do my recordings, actually, in my dressing room. So I'm surrounded by clothes, and it's getting a much deader effect. And I get some really nice quality sounds from that.

The other technique that I know professional broadcasters do all over the world - they go out, and they're doing their recordings, and they have to record their links - they typically go under their bedclothes. So, go into bed, pull up your quilt, put it over your head - you can't see what you're doing, of course, so you have to know your equipment - but then they do their little speech into the microphone, and that works very well. So, little tip there.

**Robyn:** What I like to do is avoid the places that have an intrusive sound. It doesn't matter if there's a bit of air conditioning in the background, because sometimes your microphones can look after that, and you just hear voice, and normal listeners don't notice anything particularly noisy. But big air conditioning is horrible.

But the worst thing that people - they take me to an empty room, and as I walk in, I hear the echo, because it's got bare walls, it's got no carpet, it's just an office, and they thought, you know, "An empty office is fine!" It's not! Because this reverberation makes the voice unlistenable.

And so, if I'm in a building that's unforgiving like that, the first thing I do in a place like this, if I'm in Arizona or somewhere - you go outside. Outside is wonderful. And you've got natural surrounding sounds. Sometimes it's a bit difficult if a car goes past. For instance, a big jet comes. Bring it into the conversation. Say where you are. Get a sense of place. Then the sounds fit.

**Dr. Biology and Pauline:** Ah.

**Pauline:** That's a good technique, but always be aware that that also makes it quite difficult to edit, because if you've got a sound of an aircraft passing over, you can't just cut into that and then cut back again. It will never, never fit. So just be aware that you've either got to keep that entire sequence of when the aircraft is passing over, or you're going to have to lose the lot.

**Robyn:** Same in a hotel where there's Muzak or piano playing. You can't...

**Dr. Biology:** [laughs]

**Robyn:** ...cut the bars of the music. I sometimes do that. But don't worry about it.

**Pauline:** But I agree with Robyn. I absolutely love going outdoors and doing interviews. To be in the fresh air, and hearing the birdsong, and hearing people go by, they're sort of just in the background, it brings the whole thing alive.

**Robyn:** But you see, the thing that happens then is the people you're interviewing speak differently, because they're looking at something. If you can take someone out looking at a horse or a car or a picture, they immediately use language that's everyday and present now.

They're not talking about, "We were doing something which was part of a project which we analyzed this," and all this abstract language. They're saying, "Hey! There's the horse. It's run away. Why?" [laughs] Active language. Different sorts of talking.

**Dr. Biology:** That's actually a very good point. Having things in front of you to discuss.

**Pauline:** Absolutely! It makes it so much easier for everyone. Easier for the interviewer. Easier for me, my job, so I can look at something and say, "What's going on here?" And for the interviewee...

**Robyn:** That's right. You're making your own story.

**Pauline:** Exactly.

**Robyn:** You see, you talked about the importance of story. You are in the story when you're having that sort of dialog, looking at something.

**Pauline:** And really, that's how people would have conversations normally, isn't it? They'd look at something, and they'd comment. And in radio, that's what you need. It's just behaving normally, but it's a bit of a skill to it. You want to capture that essence of behaving normally.

**Dr. Biology:** One of the ways to do the background sound, which we've talked about, is to sample the sounds separate from the conversation. So if you're a little worried that it might be dominant, that you could at least do that. And then if you're trying to get good at that type of technique, you could, with the computer and the software, bring that in.

Now, that is artificial, but it does make it easier for that editing.

**Robyn:** Sure. You have to be careful that the sound, if you're recording it, comes out of a machine that doesn't have a buzz, because some people think that you just put a microphone next to a loud speaker, and they're amazed when they get a "bzzzzz," because that is the buzz from the loud speaker. It's quite amazing that you do not get pure sound unless you seek them.

**Pauline:** I would use that technique a lot, but I'll give you a couple of examples. I was at a beach doing an interview about the moving sands on the beach, and it was a gorgeous



location, and the person I was speaking to was very descriptive, could describe everything that was going on, and the boats coming in, and the surfers.

It was a fantastic description, but the noise of the wind was just so loud. So you had the wind, and the crashing waves, and I knew that I wouldn't be able to use that. So we'd both looked at this scene, and we both knew what it was about, we actually went and did the interview behind a building.

And then, when we'd done the interview behind the building, I stood outside with my microphone, picking up the wind sounds, and the sea, and the seagulls, and then I was able to mix it in at a lower level underneath the speech that we'd just recorded.

So the whole effect let the listeners imagine that we were just at the beach, watching this scene. So we cheated a little bit, but that was necessary to actually capture that lovely, beautiful scene.

**Robyn:** And you know what David Attenborough talks about, when you've got pictures in these fantastic nature films of the polar bears playing in the snow, and you can hear the polar bear's feet go, "crunch, crunch, crunch, crunch, crunch." Could you imagine that there's someone with a microphone very close to that polar bear's foot? Of course not! But what they use is flour.

**Dr. Biology:** [laughs]

**Robyn:** Or all sorts of other devices, like they do in the movies, where they - post-syncing, it's called, where you've got dialog or sound effects that are similar. And it's better than having no sound. If you have no sound, people get distracted.

**Pauline:** Oooh, I've got a wonderful sound effect that I made once. I wanted to have this sound effect of an egg being crushed in the neck of a snake. So how do you do that? [laughs] So what I did is, I got a lettuce, and I strangled a lettuce, and that produced the most wonderful sound effect.

**Dr. Biology:** You know, it's actually interesting, because that's a whole other area that there are sound artists that do that very thing, go out and sample sounds, and I find it intriguing. I think, and actually, in the credits, are they the foley artists, maybe?

When you ask questions, when you form the questions, you can ask a really poor question, and you can ask a question that engages the person you're talking to to actually answer something with more than the "yes" or "no".

**Robyn:** Do you think, yes, the buffalo are dying out?

**Dr. Biology:** Yes! [laughs] Why do you think the buffalo are dying out? Or what is your research that's showing us that is the reason? All those things are very good.

**Pauline:** In fact, I wouldn't even ask that question that you've just done, "What is your research showing?" because that's too complicated. You just say, "Why do you think the buffalo are dying out?"

**Dr. Biology:** Very good. Very good.

What are the top things - pick one or two - the top things that you would suggest someone either do as an interviewer, or not do.

**Robyn:** Practice. Practice. Practice.

**Dr. Biology:** Practice?

**Robyn:** You go to a friend, and you take a pen. Pretend it's a microphone. If you have nothing, just take a pen. You sit next to them, outside, as I've described, and you work out what will be a five-minute interview, because knowing time is essential.

And you put your watch or some timer next to you, and you just have a conversation, five minutes, as if it's real. As if you're live on air, on network radio, network television, and you just do it. A.

And then you look down at your watch, you see how long it's taken, and work out where things went wrong. Which questions didn't quite get there? And then you think to yourself, "What if I'd had one or two beautiful, simple questions, like 'What's the point?' or 'Why?'" Very simple things that will get you out of the floundering, if you like. So practice is the essential thing. And then do it again.

**Dr. Biology:** Robyn says, "Practice, practice, practice." Pauline?

**Pauline:** Well, I agree with that. But I must tell you of a professional broadcaster who is, in fact, now a very famous sports reporter. He actually does the horse races. And you know the horse races, that people are talking twenty to the dozen, "[mumbling quickly] this horse is [mumbling quickly] jumps!"

That guy practiced from when he was eight years old. He used to just stand in front of the television, and a horse race would be going on, and he'd be recording himself, and he'd be giving the commentary!

Twenty years later, he's a world-class sports reporter. Brilliant! And that's how to do it. You practice.

**Dr. Biology:** Even though you're practicing, the idea is not to memorize, right? Because one of the things you want to be careful about is you don't want to read the question, and you don't want it to sound real stiff.

**Robyn:** You practice and you listen. That's the second one. You listen to what's being said. So you pick up on something. You've always got a little question in the back of your head, like, "Why?" or "What's the point?" But then you say, "Did that really happen?"

And sometimes, Pauline, I will have a slightly longer question when I think someone is kind of treading water. Someone needs a bit of a rest. So I'll have either a slightly longer question, or I'll have a response, an anecdote of my own. "Yes, that happened to me when I fell over the cliff. And then I got up and I put my trousers on again, and - " You know. And then I ask the question.

And that's given them a rest, a segue has happened, and we can then carry on. So I'm listening for that sort of thing.

**Pauline:** Actually, that's quite scary, isn't it, when you first start up this interviewing business, to listen? Because you're so concentrating on how you shouldn't mess up the interview that you're actually afraid to listen to what the other person's saying. The listening thing, I think, comes after a bit of time. I just remember back to my early days, I was scared. I was thinking, "Ooh, I'm in control here, but do people know how nervous I am?" [laughs]

**Robyn:** Let me just tell you, I started interviewing in 1972. 1972 was very interesting, because that's the last year people walked on the moon. There was Apollo 16 and Apollo 17, and at the beginning of Apollo 16, which I was supposed to be doing research for, the person in charge of my radio department said, "Go and interview the guy who's going to be tracking the rocket as it goes up, and the mission to the moon."

I was so nervous I actually went out of my way to be absent when I knew he was around so that I wouldn't have to do the interview. I was so scared.

**Dr. Biology:** Wow.

**Robyn:** Which is bizarre, when I think back. And eventually I thought, "Well, the whole nature of being a reporter, being in radio or television, is that you do things. You might be nervous, but you get on with it. You do the next thing, and each step in the process makes you feel better."

And so that one period - I never interviewed him. I never did. He went on the next plane back home, and it was lost. That's the last time I lost an interview. That nervousness is an absolute thing. I prepared for my real first interview.

Let me tell you another story to do with that period. When I was researching an aspect of the moon shots, I had to go as a reporter on live radio, and I was being asked various questions about Apollo 16, and I said, "Oh, yes, they'll do it. They're going to walk on the moon, there are two guys, and they're going to deploy an observatory. They're going to have something on the moon that will look at the stars, and it's wrapped in gold foil."

And the interviewer said, "Why is it wrapped in gold foil?" And I hadn't the faintest idea. I just sat there. Of course, now I'd say, "Jim, I don't know, I'm going to find out, but it isn't interesting" I mumbled something about atmospheric corrosion, of course there is no atmosphere on the moon.

**Dr. Biology:** Trying to make it out doesn't work at all, it's better to say it when you don't know something, correct?

**Pauline:** Absolutely yes, it's just too embarrassing to put your muddle on either live radio or put it on a podcast and it's going to be there indefinitely, no I'd like to get my facts right.

**Dr. Biology:** The way this has been laying out is just beautiful, it's a nice story, it will help someone starting out in their interviewing process.

But again, to get back to your personality, even though you've both done a very good job of it. There are a couple of things that I'd like to mention, one of many is that Robyn is a very young looking person, we keep talking about how old he is and the word dinosaur has come out, but I have to tell you that if you go up on the website and go to 'The Science Show' You will see that he is not an old looking gentleman, he is definitely spry and he has that sparkle in the eye I think, that's what I saw right away.

**Pauline:** He's never been bored with science, he's always been so fascinated and wanting to really talk about the latest, the best, and who is achieving what. He hasn't lost any of the sense of magic about science, it's wonderful.

**Dr. Biology:** The question I have, a very simple one, and it might be easy to answer and it might be one that you stumble on, when did you first know that reporting was going to be your career?

**Robyn:** Well, I suppose I... It's a really interesting question, knowing when you first did something as a human being is often hard to work out, let alone something so important as this. But I suppose when I did my first... I talked about failing my interview and running away, but then I really concentrated.

And I found that I was interested in the guy's answer, and I wanted to know what he would say next, I really was keen. And I followed that hunch, and I didn't worry about

asking silly questions, I just followed my interest.

And that kind of engagement was obviously something that the guys and the girls responded to, everyone responds to, because I really want to know.

And having interviewed them once, some people I've interviewed nearly a hundred times, I want to know what happened next, you see?

**Dr. Biology:** The story continues.

**Robyn:** The story continues. And to find out what the answer is, it's like running thousands of detective stories, eventually you come to the resolution. And of course when you come to the end of the book, there is another one coming. So that really is the answer to your question, I wanted to know.

**Pauline:** I don't think I started off wanting to be a journalist, I think I started off wanting to be involved with the broadcasting industry. I started off... In fact I'm wearing a sweatshirt from one of the BBC local radio stations that I was given almost twenty years ago, this was actually where I first worked.

It was just such fun, because in live local radio you just get to do a whole mixture of everything. In fact, I ended up as a sports reporter, I had to learn about speedway, that sort of motor-bikes going round and round in circles, and learn a bit about football and cricket.

And it just enabled me to take on new challenges and try a bit of everything, so it's just great fun. And then I decided I wanted to specialize, because I have always loved science, and I've always been reading the magazines, and I was able to do that, I was able to do that in London, it was just a great experience.

And then I found out that I could be creative, I could actually find a way of expressing myself. And as a kid I had always hated writing stories, when I was about twelve years old in High School we were given an exercise book and told to write a story 'Fill up this exercise book with your story'

So I began and it was all pathetic, I know I chose a girl's name Rachel, it was Rachel and Samantha and what adventures were they going to get up to. It was so utterly boring, I was sick of it in two pages. Then I thought that's the end of it, I never want to do any writing ever again.

And then I discovered that in broadcasting there is whole different way of expressing yourself, and now I love writing. But my writing is semi-technical writing, it's telling science stories, and it's just exactly right for me. And so that's my way of expressing creativity.

**Dr. Biology:** Perfect. I have one last question for both of you, I might know Robyn's answer to this, but I don't think I would know Pauline's, so I am going to start with Pauline. If you weren't a reporter or a journalist, and it's going to be taken out of your life, what would you be?

**Pauline:** Goodness me! Oh, that's really tough, that is so hard, I just don't know what I'd do. It's so much part of my life now, I really can't imagine. Maybe if I had my chance again, I think I would go into biology, I think that's the field I'd really choose.

I did a bit of that before, and that was before the days of all the discoveries about genetic material and polymerase chain reaction and everything like that, so it was all very basic. But now I think there is so many exciting things going on in biology, and the human origin side of things, I think I would go into that sort of field. Otherwise I would be a birdwatcher.

**Dr. Biology:** Perfect. And considering we're on 'Ask a biologist' that's a good choice. OK, Robyn?

**Robyn:** You said you'd know my answer, what is it?

**Dr. Biology:** You know, just because you started out in acting, I would have to think that you could be the actor, because you are doing that now, but it's in a different form.

**Robyn:** Do you know I was a very lousy actor. While I was at university I did a whole number, thousands really, of television parts and film, I was in 'Monty Python: The Goodies' And I was willing to have my hair cut because those were the days when you had long hair, and I could be a policeman with short hair, so I played a policeman a thousand times, cops.

But being surrounded in the BBC and other places around England with the best actors you could imagine, you knew that there was a skill, you just didn't blunder on and say things, there were huge kills involved.

So I did enough to tell me that that was not what I should do. I would be a writer if I weren't a broadcaster, I have written quite a lot of books. And I love the process of sitting down in the morning and writing something, it could be fiction, I've written a novel, and I just finished a book two weeks ago.

And the process of doing that, you sit down in the morning and then you give it away

after mid-day, otherwise you get stale. And then you read things, and then you go for a run, exercise is the most wonderful way of thinking of new ideas. Anything that's troubling you, during that run the answers come in.

And the different associations, Pauline talked about sound effects, while ways of writing the kind of language phrases pop in to your head during exercise and walking, you don't have to run necessarily, so I'd be a writer.

**Dr. Biology:** Excellent. And actually in the introduction we talked about your ten books, and now is that going to be eleven?

**Robyn:** I'm afraid so, yes.

**Dr. Biology:** Eleven books, marvelous. Well Pauline Davies and Robin Williams, thank you for visiting with us, this is just marvelous. I know the young reporters out there are going to appreciate this.

**Robyn:** It's a pleasure.

**Pauline:** It's a great pleasure.

**Dr. Biology:** This has been a brief introduction in science reporting. Now you've learned many of the tips and techniques of science journalism, and the interview process from two of the best radio journalists in the world, what are you waiting for? We learned today that the best thing you can do is practice, practice, practice.

In case you need some help with the equipment and software to make your own podcast or radio programs, you can visit the 'Ask a biologist' website where you will find equipment and software recommendations on our podcast page.

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I'm Dr. Biology.