Molly (<u>00:00</u>):

Habits are who we are and we get to choose every day who that is. What's remarkable about these women is that their habits are changing the world. Hi, and welcome to habits. The good, the bad, and the Holly I'm Molly. And I'm sitting down every week with the doors of the blood of Christ, religious sisters, to hear their stories and learn how habits have become more than a symbol for their vocation. They become the means to which they change lives. Hi, and welcome today. We're here with sister Margaret Canova. Margaret. Welcome. Thank you so much for sitting down with us. You're welcome. So you are, uh, pretty well-known, uh, in the AFCs you've been called a trailblazer. Um, specifically you were featured in an article on the Newman university website where you were called the treble. Is there and talked about the incredible hunt you went on for education. Can you talk about, um, a little bit of your time spent, uh, getting the, the depth and breadth of education?

Margaret (01:05):

My story began with my life on the farm. I was one of six children. My father died when the youngest son is six weeks old and my mother stayed on the farm. She didn't do the field work. Her brother did that, but she took care of milking the cows and feeding the chickens and doing the garden. And I love to do that with her. My two sisters liked to cook and I hated to cook. So I was outside.

Molly (01:41):

So you learned responsibility really early, that there were things to be done. Always. Do you think that that led you down the path to be,

Margaret (01:52):

Could be? And also I like to be, I would do something that maybe others would do. Like the Catholic school didn't have a band or music, so we could join the grade school band after. And it was held after school hours with the public school. And I asked my mother if I could do that. And she says, yes, but you'd have to walk home. Well, I was willing to walk the mile and a half home because I wanted to play in and I got a clarinet. I learned that at grade school already. So when I went to the Academy, most freshmen were in a beginner's band and I was at Christmas time, took first chair in the major band and, and, uh, you know, concert band. Wow. So,

Molly (02:52):

So excellence has been your partner through life from a very young age.

Margaret (02:58):

Yes. And I just had the opportunity and was willing to take what went with it,

Molly (03:06):

Labor willing to put in the work to get the result

Margaret (03:08):

You wanted. And

Molly (<u>03:10</u>):

So it never crossed your mind, you know, through any of your schooling or through any of your education, that it would be too hard. You just, you knew exactly what needed to be done.

Margaret (<u>03:21</u>):

I can tell you a story about that too. Yes. I was in a second first grade with 27 of us. I ranked 17. So I was toward the bottom of the class when I was a third grader. We were learning our times tables. And so we would go to the board and, and write these down and I decided I could beat the fast one. And I was going to that's one day. I decided that and sure enough, I beat Mary Jane Heights. I liked that. You still remember her name. I do. And from then on, out of the never last in the class,

Molly (<u>04:02</u>):

I think the bug bit you, I think you knew you learned what it was like to be on top and you haven't been anything else since then,

Margaret (04:10):

But that was early on,

Molly (<u>04:12</u>):

Early on that baby,

Margaret (<u>04:16</u>):

I started out as many of we sisters in those times teaching with a 60 degree certificate. So I started teaching grade school grammar school for the first three years. I had four grades, the first four grades plus music. I was able to play the Oregon. I enjoyed playing the clarinet when I was in high school. So I've kind of had a feel for music and always was assigned to do the music for the liturgy for the church as well as for school purposes. So that was my beginning. I was happy teaching grammar school in a small schools. And then which had tall, where I had 64 children in a room made for 36, mostly S fifth graders, plus a small section of sixth graders. And I was happy doing all that, going to summer school to finish my degree in education one summer, I got an assignment that said I was to go to Creighton and take a chemistry class.

Molly (<u>05:37</u>):

Had you always been interested in science or was this a new love for you?

Margaret (05:41):

Uh, it was kind of ingrained in my family. I have a brother who got a chemistry major, a sister who was a med tech? No, in fact two sisters who were in med tech. So we're kind of in, at home in the science field, definitely ran in the family. Right. So I got my first course in chemistry. Uh, I was told to continue there during the one year, then I was told, well, you can't get your doctorate here applied to Notre Dame. Wow. Which I did. They accepted me and gave me a scholarship because I was one of the younger sisters that ever applied for graduate work.

Molly (<u>06:29</u>):

So how old were you in? What year was this?

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Margaret (06:32):
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Yes, maybe 31, 1960. When I was asked to take that first course in chemistry. So I was born in 31. So I would have been what, 29.

Molly (06:48):

And you were one of 65 women who attended Notre Dame through that graduate program. Do you remember how many men were in that program?

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Margaret (06:57):
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Uh, no, because Notre Dame was all men, except for us 65 sisters.

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Molly (07:04):
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You 65 out of 8,000 men. That's incredible. Do you remember what that was like to be one of the first women to be able to do something like that?

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Margaret (<u>07:15</u>):
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Well, we kind of stayed together. We had our apartments townhouses a little off campus. So we were where the young guys were ordinarily. Uh, we use the open guest cafeteria for our eating. So you couldn't eat with the men. We didn't, we didn't really know they had their dining room. This is a loss side one day. They decided to cut the size of the glasses down for the milk. Why? Well, I guess they were wanting to live at the amount of milk skies, these 8,000 kids drank. So they got the glasses now. And what the kids did, they dragged their glass of milk and dropped the glasses on the concrete floor. They did.

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Molly (08:12):
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Oh. And did you ever feel like the men felt some type of way about the fact that women were being allowed in or were they welcoming to you?

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Margaret (08:26):
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We were two different groups. We really never, we were graduates. They were undergrads. So no, we very seldom.

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Molly (08:37):
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Okay. So you went to Notre Dame and got a degree in what?

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Margaret (08:42):
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Organic chemistry, organic

Molly (08:44):

Chemistry. You're smiling. You love it.

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Margaret (08:47):
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I did. I loved it. And I did some research that was difficult. And in fact, it took me two years to get my first quantitative data. And I said, every my director world-renowned was also chair of the department.

So he was down in the office. We were expected to report our progress every month. So we had to type out everything we did as research data and progress. And so I remember it was like April of the second year of my research that I first got a quantitative number and I said something to him and he said, Oh, you're doing fine. I wasn't so sure at Christmas, but I know now you're doing fine. But I knew what he was referring to. There was a senior post-doc from new South Wales, Australia. And he told me he was going to tell my director that my project was too difficult for graduate students.

Molly (09:56):

Wow. So you showed him,

Margaret (<u>09:58</u>):

So I knew that background. So when he says, I didn't, wasn't sure at Christmas, but I know now,

Molly (10:06):

So that, that postdoc told your advisor that the project was too hard for you. Well, you showed them didn't you.

Margaret (10:18):

And he would go to Peru because he could speak Spanish as well as English and German. Uh, and he would teach there summertime. So, and I, every week would mail my work to him. And one time he fired back to, you know, what you have. Well, I didn't know what I had. What did you have? Uh, I got the confirmation analysis of the one, three dioxane T beautiful substituents. And they go from what is described as a boat confirmation to a chair confirmation

Molly (<u>10:59</u>):

For someone who does not understand anything that you just said, what does that mean?

Margaret (<u>11:05</u>):

It means you study how much the molecule prefers to be like a boat or like a chair. And it flips back and forth. It predominantly stays in one or the other. And this one with the T butyl group was 99, 97% in one confirmation. Interesting. So,

Molly (11:33):

Hey, everyone, Molly here for those few who are confused at the organic chemistry lingo and are wondering why this is such an important discovery, the determination of whether a molecule looks like a boat or a chair helps determine why certain chemicals interact differently. Uh, it describes the stability and what reactions they might have. This is important because it shows why some molecules that look the same behave differently. Okay. I hope that clears it up a little now back to the interview. So you were lauded for the methodical approach that you took to research, and you said that it had a lot to do with the fact that you were a woman and there weren't many women doing research at that time. Can you talk a little bit about that?

Margaret (12:20):

That's right in the sciences, there were five of us, just five, just five. And Dr. Leo was on the private board of trustees, as well as the advisory, whatever it is. He went to the officials, the administration to

say, we need to have women because based on what women do compare to how men do things, we need the, the touch of the woman or the women in doing research. Wow. And it was right after that, they went coed.

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Molly (13:04):
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So you are quite the trailblazer. You kind of took a passion in your hand and did whatever it took to prove that, that you were good at it.

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Margaret (<u>13:13</u>):
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Well, I was lucky.

Molly (13:16):

Oh, but it was a lot more than a lion. Yes.

Margaret (<u>13:19</u>):

And I enjoyed it very much by Dr. Leo was a German born Jew who knew persecution during the second world war. He was, um, I guess when do you call it in prison, but anyhow. Oh, in a concentration camp? No, he was so he wouldn't be in the concentration camp, but he would've lost his life. He was 17 years old and he was in a camp in Canada with the prisoners. And he said there was one water pump for like 3000 bed.

Molly (14:01):

Wow. So he knew struggle and he knew stripes. And that gifted him with empathy and grace that let you have a space to create that way.

Margaret (<u>14:10</u>):

And after that, he was, he couldn't go back to Germany. Of course. And he couldn't get into the States. So he went to Cuba and he was there five years learned Spanish, had got her doctor of science. He was very bright and very talented. So, and I was very fortunate to have such wonderful experiences.

Molly (<u>14:36</u>):

So you did something pretty amazing with that chemistry degree, you created something at Newman university, didn't you?

Margaret (14:44):

Yeah. I was sent there with the purpose of coming back and establishing the chem. So you

Molly (<u>14:52</u>):

Are the entire reason. There is a chemistry degree at Newman university.

Margaret (<u>14:57</u>):

Well, and I wasn't there very long.

Molly (<u>15:01</u>):

You were, you made a quick work of it.

Margaret (<u>15:03</u>):

I had a slight belt bout of Ms, but it was kind of fleeting. And I recovered now. I had another bout and I was hospitalized. I came back and well, there was only one other chemistry teacher and I couldn't carry my load of 14 hours. I couldn't stand on the concrete. So the Dean said, either you do it or you're out of here. So I had to reside.

Molly (15:35):

So you're the reason it started made, made you resigned.

Margaret (<u>15:40</u>):

That's, you know, when you're in business, that's the way it goes. So that was the end of my chemistry.

Molly (<u>15:47</u>):

But you taught at Newman for a few years, chemistry,

Margaret (<u>15:53</u>):

But not very long. See,

Molly (15:55):

I have a quote from one of your students, uh, saying that you were a demanding teacher with a high bar to reach, but had the ability to show you where the ladder was and how to use it. That's pretty great. Praise from a student. Uh, did you love teaching as much as you loved learning?

Margaret (<u>16:13</u>):

I did. I did. And I loved teaching organic chemistry because there was a unpredictable sense that, and I always taught them this, what you have could catch fire. I wanted them to know right up front with the flammable, ethers and alcohols, they could have a fire

Molly (16:37):

Been prepared. Uh, so after you left teaching, you were an alumni director for a while, and then you were elected to leadership. What position did you hold on leadership? One of the council councilors. Um, what was that like going from, cause you joined when you were 22 years old, you took final vows when you were 22 years old. Um, which can seem inconceivable to a lot of women today who are 22 years old, I'm dedicating their life to something. And then that was in 1955. So 40, only 35 years later, you were elected to leadership. What was that like?

Margaret (<u>17:21</u>):

Part of the team. And so we worked as a team, did a lot of sharing among ourselves. We had a person who taught us how to be T how to reflect and discern and come, not by vote, but by discernment to decisions. So we had that preparation, which made time more enjoyable. Yeah. And so they were good years. So you've

Molly (17:50):

Done a lot in your life. You've had a pretty remarkable life. What is the FA what's your favorite thing? What's the best thing you've ever done?

Margaret (<u>18:01</u>):

Ooh. I would have a hard time choosy. Now there's one mother, one other big project I did. And that's direct the pastoral ministry program for the Dodd city diocese, which was there would be one teacher and there were like 10 classrooms in 10 different cities. And they were all connected by interactive TV.

Molly (<u>18:27</u>):

Oh, wow. And that was all you, you made that happen?

Margaret (18:30):

I directed that I was not a theology faculty, so I didn't teach in the courses, but yes, I found the faculty. So I did that until I turned 70.

Molly (18:44):

So you, you went to Dodge city and you saw that there was a need for this program and you just whipped it all up and put it together.

Margaret (18:54):

There was another sister who had her degree in theology and she was the one who developed the program that way. And then I just found the faculty to teach the courses. So most of them were from the diocese there.

Molly (19:16):

Okay. And what kind of impact did that have on the students?

Margaret (19:20):

These were all adults now. Wow. And it made a difference in their personal life and in their parish life and in the diocese.

Molly (<u>19:31</u>):

So you really gave them access to that spiritual fulfillment that they were craving.

Margaret (19:38):

That's right. That's right. And some of them talk about it even now. And one of the faculty, one of the most creative faculty keeps in touch. I, we share Christmas and Easter cards.

Molly (<u>19:56</u>):

Oh. So it's still to this day, reverberates, that seems to be a theme for you. You mentioned earlier telling your organic chemistry students, that the things they're working on can catch fire literally, but it seems that everything you touched along the way caught fire figuratively, a chemistry program at Newman is still running and churning out chemistry students. You still have a profound impact in integrating women

into Notre Dame, um, integrating women into science research, bringing the ITV program to Dodge city. Um, so I think everything you did caught fire too

Margaret (20:35):

Well, I hope so. And there are a couple of the things I organized for faculty in the various divisions or disciplines to be the core faculty for the pre-med program.

Molly (20:53):

You created the pre-med program at Newman. Well, well, yeah, you're so modest about it, but you did it

Margaret (21:01):

Just kind of organize that so it could flourish. So yes.

Molly (21:08):

Education has been obviously a love of yours, a passion project of yours, something you've dedicated the majority of your life to, what did you think when an anonymous donor made a gift of \$25,000 to establish a scholarship in your name at Newman?

Margaret (21:26):

Well, I'm humbled and very happy, very grateful. And I've pretty well known who the person is. So maybe not so anonymous, not so anonymous to me. Uh, she's someone who got her degree at Newman in chemistry went on to Colorado.

Molly (21:50):

Well, I mean, what does that mean to you to have been a foundation on which something so remarkable was created?

Margaret (21:58):

Well, that just warms my heart because that means there's money available for new people for more young people. Yeah. So yes.

Molly (22:10):

Uh, when the gift was made, this was written along with it citing a great respect for you and a desire to recognize the high level of energy and enthusiasm you brought to your work at Newman. Um, they noted your love of life, happiness with your religious life and commitment to students and ability to help them realize their full potential.

Margaret (22:31):

Yes, the Lake set that, but isn't that a beautiful if somebody would say such nice things,

Molly (<u>22:42</u>):

I think it's incredible, but I think your entire life has been, I mean, I think this is just a Testament to the seed you planted long ago. Um, you know, when you were 22 and just starting, you've obviously had a very remarkable life. We've heard a lot about your life and some of your habits that you are very

deliberate with your research, you've dedicated huge parts of your life to education and helping students. What would you say your best habits?

Margaret (23:13):

Yes. I would say out of all of that comes this deep gratitude for what God has given me and what I could do with what gifts God has given me. So it's, it's a matter of gratitude. Do you have any bad habits I guess, and sometimes come across as bossy?

Molly (<u>23:37</u>):

I don't think you're bossy. I think you are the boss. Well, thank you again so much for coming in. I really appreciate

Margaret (<u>23:46</u>):

It. I enjoyed visiting with you. I'm so glad. Thanks

Molly (23:49):

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