Welcome, members of the Earlham class of 2018!

And a hearty welcome to your parents and/or other family members who have accompanied you to this threshold of your new adventure.

This afternoon I’d like to discuss the key to your successful adventure — a very special part of your anatomy.

No...good grief!...not that part! And not that one either — but an interesting guess.

No, today I want to talk about your brains. And I do mean your brain, and not mine or your parents’. Specifically, I mean your more-or-less 18 year old brains.

Your “late-teen-to-early 20s” brains have been in the news for some time now. And frankly, I am here to tell you, the news has not been all that good.

As you probably have read (I hope I’m not breaking this to you for the first time...), you have “un-developed pre-frontal lobes” — those spots somewhere in the fronts of your heads where the neurons and synapses that might foster things like prudent risk assessment, sober judgment, and “making good choices” instead fail to fire, or spark, or transmit, or whatever it is that neurons and synapses actually do. (Footnote: Alas, I am living evidence of the sad state a meager education in the natural sciences puts you in. I was a single-minded humanist who escaped college with only “a science for non-scientists” course in science under my belt. Don’t make that mistake — you will be desperately trying to make up for it the rest of your life!).

Anyway, back to the bad news. Your lamentably un-developed pre-frontal lobes are so distressing that they provide a weird kind of self-excusing temptation for parents — and college administrators. Shocked at the latest exhibit of outrageous late-teen risk taking or abysmally poor judgment, we are tempted just to throw up our hands and say: “How could he/she do that?? Well, what can you do? — their pre-frontal lobes are just so lamentably un-developed!”
Well — it turns out there’s really a lot more to this story, which I learned this week from reading a splendid essay by science writer David Dobbs called “Beautiful Brains,” first published in National Geographic and then included in the 2012 edition of Best American Science and Nature Writing, and one Google click away online. Dobbs is one of those clear, substantive, simple-without-being simplistic science writers for whom people like me who ducked real science courses will be eternally grateful.

It turns out that recent brain-imaging, psychological investigation, and evolutionary theory show us that the very features we though were just signs of regrettably slow cognitive development are better thought of as evolutionary adaptations perfectly matched to the demands of late adolescent life.

Now, we all know what personality features we are talking about here, and Dobbs helpfully zeros in on the big four: thrill seeking, lust for novelty, risk taking, and a preference for the company of one’s peers.

Just how dangerous can that combination be? Well, they are the prime ingredients every parent’s — and every student dean’s — and every college president’s — worst nightmare.

But as Dobbs explains — these attributes are not really the most dominant features of adolescent brains, but just the ones that stand out the most to us older people because they annoy parents and college administrators and put our children at so much real risk.

Why would evolution permit such seemingly dysfunctional traits? Wasn’t it supposed to weed that stuff out?

It turns out these features were not weeded out because they are only the most visible developing parts of tremendously useful capabilities:

- **thrill seeking** urges late teens to seek out new people who share their passion, helping them build socially supportive networks;
- **their quest for novelty** opens late teens to what is unanticipated and unpredictable but potentially valuable despite being overlooked by older people;
- **risk taking** allows 18-to early 20-somethings to confront fearful obstacles in order to obtain what are regarded as large rewards (I just had to slip in “regarded as” because the nature of a truly meaningful reward changes as brains develop, and so teens and older people are going to argue about this because they relate risk and reward differently);
- and — finally — **hanging out with one’s peers** prepares adolescents to leave the world made by their parents for the one that will be made by people their own age.

Dobbs sums up the evolutionary advantage these traits impart: they produce “a creature optimally primed to leave a safe home and move into unfamiliar territory” (p. 164).
Now students —

We parents (and parental surrogates) get up pretty early in the morning to hone our skills at thwarting your thrill seeking love of novelty, your risk taking pack-behavior, with time-tested (and supremely fruitless) lines like:

• A hot-air balloon? 55 miles an hour in a regular car should be excitement enough for anyone your age”

and

• “You know, we’ve always done it this way for a reason”

and

• “You are aware that this stuff destroys your brain cells, right?”

and

• “So, I suppose that means you would jump off a cliff if all your friends told you to?”

But DNA and evolution pretty much guarantee that — behind our backs, if necessary — there is going be hot-air balloon riding, things will be done in new ways, some brain cells will sacrifice themselves to the slow, painful and risky acquisition of better judgment about true rewards, and there will be some groups that — hang gliders in hand — are going to look for a nearby cliff.

In the face of such ridiculousness — we older folks have to swallow hard, and swallow hard again — and recognize that we are watching the scary development of just those attributes that will enable our children to do the one big thing they must do.

As Dobbs concludes: “The resulting [adaptive, evolutionary]... account of the adolescent brain... casts the teen less as a rough draft than as an exquisitely sensitive, highly adaptable creature wired almost perfectly for the job of moving from the safety of home to the complicated world outside” (p. 160).

And thus we arrive at...today.

Today, your children — our students — really begin in earnest to make that move from home to world, and you — and we — begin in earnest to help them do it. It is going to be exciting for us all, and at times it is going to be a real pain.

So to students, I say: please recognize that we older folks are going to fret about your thrill seeking and risk taking, and, whether you like it or not, we are going to do our best to keep you reasonably safe while not suppressing the very spirit by which you will fashion your own futures.

And to parents, family members, and my fellow educators, I say: let’s take a big breath and remind ourselves — again — that much of what young people can do that most annoys us, or makes us anxious, or outright scares us — displays underneath precisely those emerging and maturing
capabilities that will help our sons and daughters, our nieces and nephews, our brothers and sisters — our students — make their own way in a world plenty frightening in its own right, and definitely not made for them. We know this — but we have to keep reminding ourselves, especially today.

So class of 2018 — welcome. You’re about to be really on your own in a way new for you, among new peers, and yet we — the Earlham community, which now includes — at an appropriate distance — your parents — this community plans on being fully present for you, along the way, as needed.

We know that most of the time you’ll want us out of your way, and mostly that’s a good thing. In this case, “fully present” paradoxically entails an educationally strategic withdrawing to allow new creation — those developing neurons and synapses — to grow, develop and emerge. That’s why we maintain a no-flight zone here for those so-called helicopter parents we sometime read about circling other schools. (Older brains more readily pick up on subtle hints like this…).

So — new Earlham students

• Explore — but take a compass. And maybe some water.
• Stretch yourselves — a lot — but don’t break.
• And, as our president recommends — and I paraphrase (because I have an older brain) — “don’t do stupid stuff.”

But do stake out your claims — starting now — to futures you will be able to say are very much your own.

Welcome to Earlham.

(Endnotes)